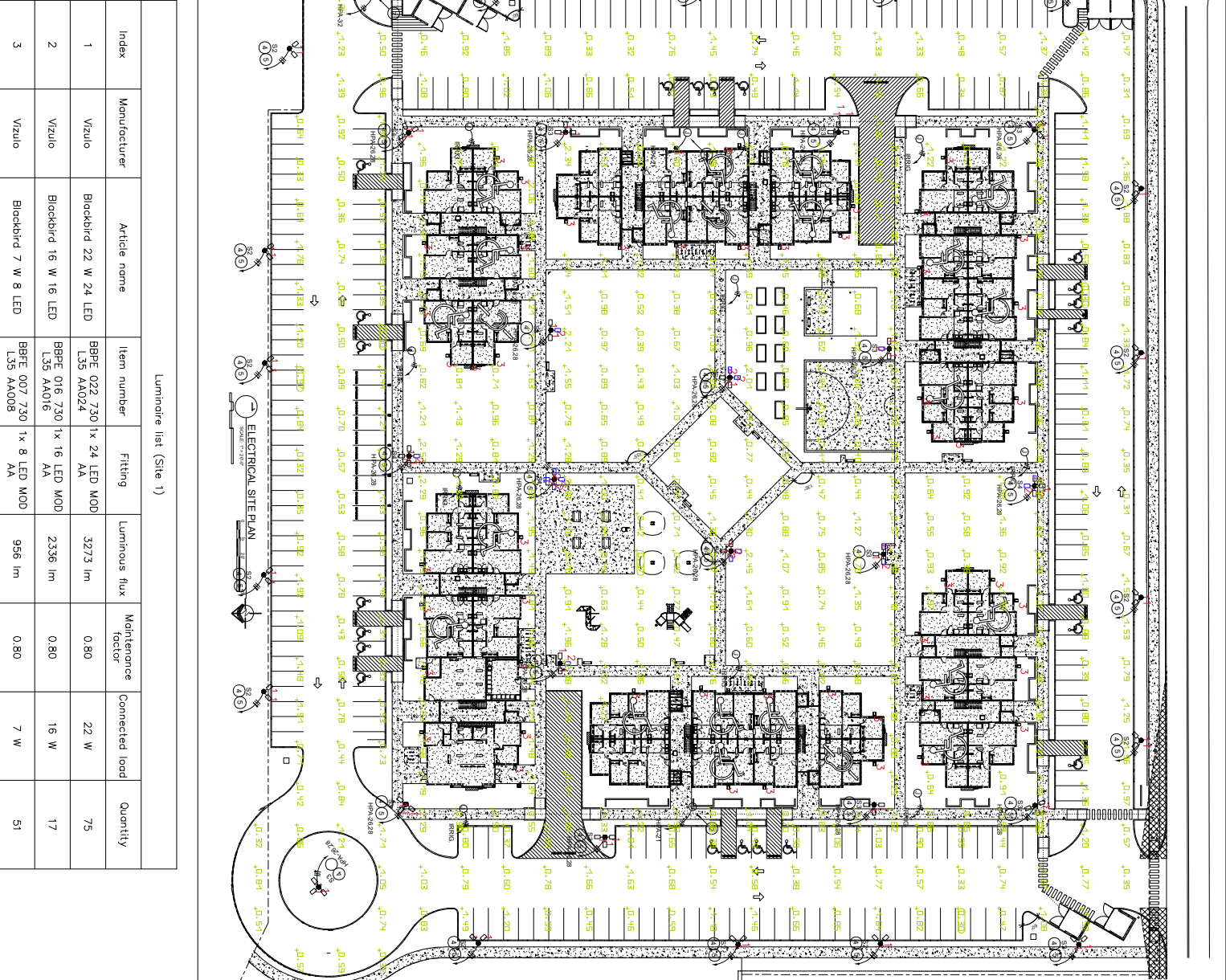


Luminaire list (Site 1)						
Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Maintenance factor
1	Vizulo	Blackbird 22 W 24 LED	BBPE 022 730 1x 24 LED MOD L35 AA024 AA		3273 lm	0.80
2	Vizulo	Blackbird 16 W 16 LED	BBPE 016 730 1x 16 LED MOD L35 AA016 AA		2336 lm	0.80
3	Vizulo	Blackbird 7 W 8 LED	BBPE 007 730 1x 8 LED MOD L35 AA008 AA		956 lm	0.80
						7 W
						51



POLE BASE NOTES

- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.

POLE BASE MOUNTING DETAIL

LIGHTING CONTROL DIAGRAM

GENERAL NOTES

- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.

ELECTRICAL KEYED NOTES

- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.
- ALL LIGHT AND CONTROL WIRING SHALL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALBUQUERQUE ELECTRICAL CODE.

WEST MESA RIDGE APARTMENT COMPLEX

64 th. St. and Glenrio Rd.
Albuquerque, NM 87121

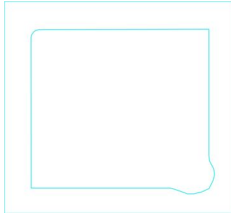
JEEBS & ZUZU, LLC.

ARCHITECTS & CONTRACTORS
MAKING HOUSE CALLS

11030 MENAUL NE
ALBUQUERQUE, NM
P. 505-797-1318

Site 1 (Light scene 1)

Outside the territory



Properties	$\bar{E}$	E_{min}	E_{max}	$\bar{E}/E_{min}$	E_{max}/E_{min}	Index
Outside the territory Perpendicular illuminance Height: 0.000 ft	0.038 fc	0.00 fc	0.43 fc	-	-	CG3

Utilisation profile: 22 - LIGHTING FOR COMMON APPLICATIONS (Building Entries /Outdoor; Non-covered Entries/Exits, Immediate Exterior, Paths to Curb, High Activity, LZ1)

Notes on planning:

The results were calculated without consideration of objects and furniture. No results were determined on their surfaces.

BLACKBIRD Flood light Eco
8082100026
BBFE 007 730 L35 AA008 CB NAH1

Project West Mesa Ridge-
Customer VIZULO USA Inc



Color RAL 9005

Electrical	Input power	7 W
	Input voltage	110 - 277 V
	Frequency	50 - 60 Hz
	Power factor	0.52
Optical	Optic name	L35
	Optic type	TYPE-IV
	Luminous flux	956 lm ±10%
	Luminous efficacy	136 lm/W
	Performance temperature Tq	+77 °F
	Constant light output	No
	Color rendering index	>70
	Color temperature	3000 K
	Color tolerance	5 SDCM
	ULOR	0
Lifetime	LED quantity	8
	Lumen depreciation	L90 after 100 000 h
	Warranty	5 years
Protection	Ambient temperature range	-40 ... +121 °F
	Surge protection L-N	10 kV
	Surge protection L/N-PE	10 kV
	LED module thermal	No

protection w/ NTC	
Ingress protection	IP66
Impact resistance	IK10

Housing

Body material	Die-cast aluminium
Cover material	Flat tempered glass
Optic material	PMMA
Body color	RAL 9005 (jet black)
Dimensions	18.0 x 17.2 x 9.4 in
Max wind load area SCd	1.076 sqft
Mounting	Flood light
LED module replaceability	Replaceable by a professional
Driver replaceability	Replaceable by a professional
Accessibility of electronic components	With tools

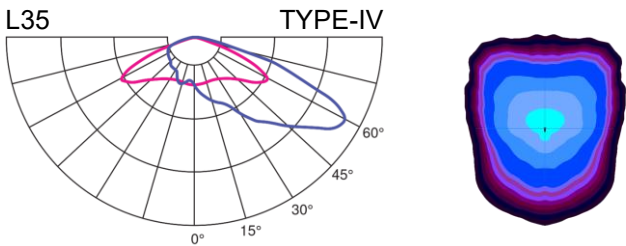
Controls

Dimming	1-10 V
Dimming range	35 - 100%

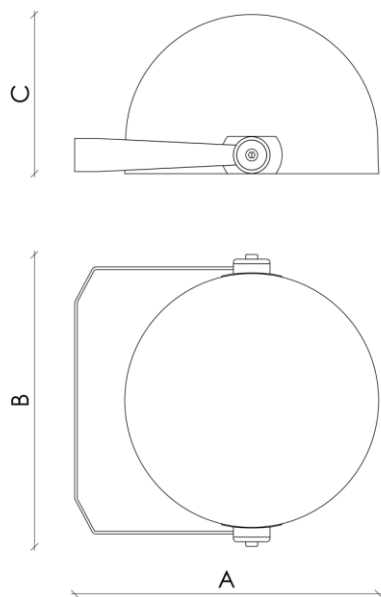
Approvals

UL	Yes
International EPD System	Yes

Light distribution



Dimensions



Product images



BLACKBIRD Post-top Eco
8082100027
BBPE 016 730 L35 AA016 CB NAH1

Project West Mesa Ridge
Customer VIZULO USA Inc



Color RAL 9005

Electrical	Input power	16 W
	Input voltage	110 - 277 V
	Frequency	50 - 60 Hz
	Power factor	0.85
Optical	Optic name	L35
	Optic type	TYPE-IV
	Luminous flux	2336 lm ±10%
	Luminous efficacy	146 lm/W
	Performance temperature Tq	+77 °F
	Constant light output	No
	Color rendering index	>70
	Color temperature	3000 K
	Color tolerance	5 SDCM
	ULOR	0
Lifetime	LED quantity	16
	Lumen depreciation	L90 after 100 000 h
	Warranty	5 years
Protection	Ambient temperature range	-40 ... +121 °F
	Surge protection L-N	10 kV
	Surge protection L/N-PE	10 kV
	LED module thermal	No

protection w/ NTC	
Ingress protection	IP66
Impact resistance	IK10

Housing

Body material	Die-cast aluminium
Cover material	Flat tempered glass
Optic material	PMMA
Color	RAL 9005 (jet black)
Dimensions	17.6 x 15.0 x 13.4 in
Max wind load area SCd	1.076 sqft
Mounting	Post-top (60 mm)
LED module replaceability	Replaceable by a professional
Driver replaceability	Replaceable by a professional
Accessibility of electronic components	With tools

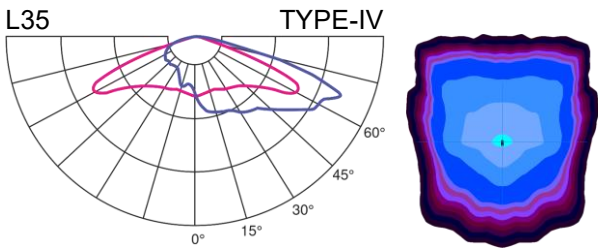
Controls

Dimming	1-10 V
Dimming range	21 - 100%

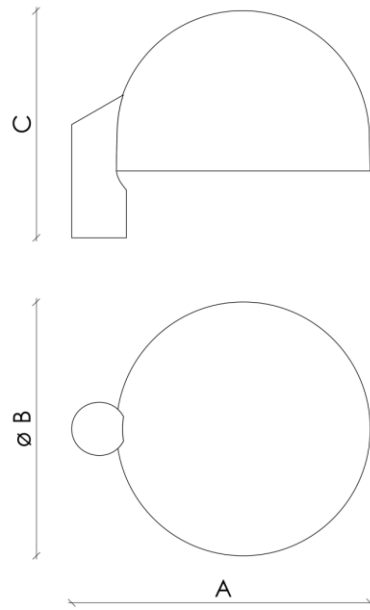
Approvals

UL	Yes
International EPD System	Yes

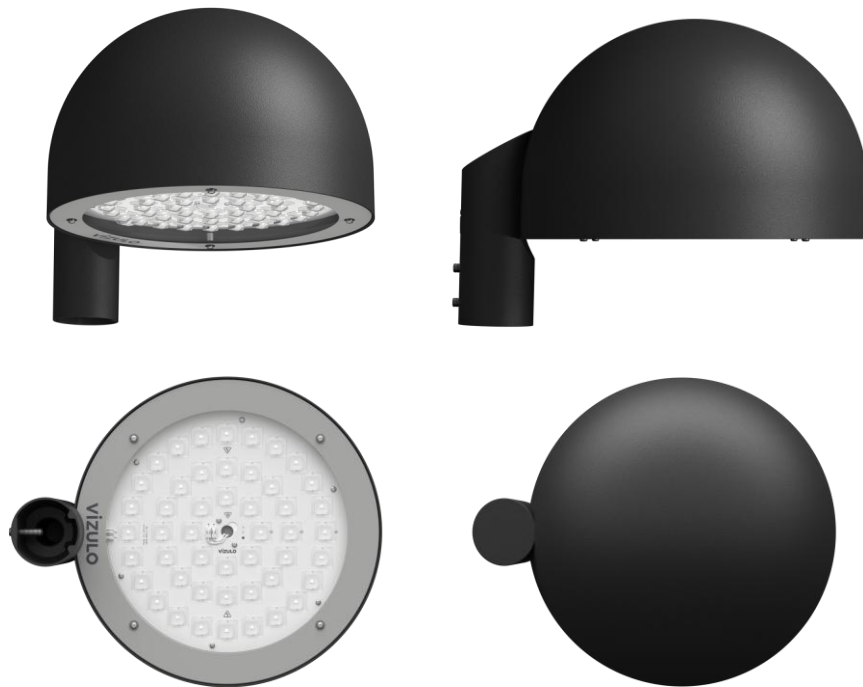
Light distribution



Dimensions



Product images



BLACKBIRD Post-top Eco
8082100028
BBPE 022 730 L35 AA024 CB NAH1

Project West Mesa Ridge
Customer VIZULO USA Inc



Color RAL 9005

Electrical	Input power	22 W
	Input voltage	110 - 277 V
	Frequency	50 - 60 Hz
	Power factor	0.96
Optical	Optic name	L35
	Optic type	TYPE-IV
	Luminous flux	3273 lm ±10%
	Luminous efficacy	148.8 lm/W
	Performance temperature Tq	+77 °F
	Constant light output	No
	Color rendering index	>70
	Color temperature	3000 K
	Color tolerance	5 SDCM
	ULOR	0
	LED quantity	24
Lifetime	Lumen depreciation	L90 after 100 000 h
	Warranty	5 years
	Ambient temperature range	-40 ... +121 °F
Protection	Surge protection L-N	10 kV
	Surge protection L/N-PE	10 kV
	LED module thermal	No

protection w/ NTC	
Ingress protection	IP66
Impact resistance	IK10

Housing

Body material	Die-cast aluminium
Cover material	Flat tempered glass
Optic material	PMMA
Body Color	RAL 9005 (jet black)
Dimensions	17.6 x 15.0 x 13.4 in
Max wind load area SCd	1.076 sqft
Mounting	Post-top (60 mm)
LED module replaceability	Replaceable by a professional
Driver replaceability	Replaceable by a professional
Accessibility of electronic components	With tools

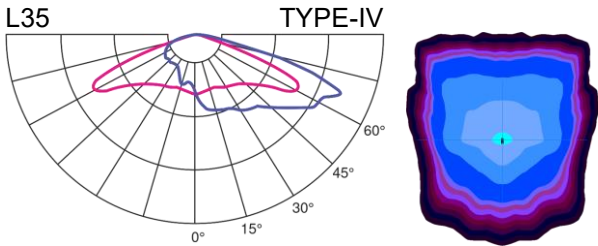
Controls

Dimming	1-10 V
Dimming range	15 - 100%

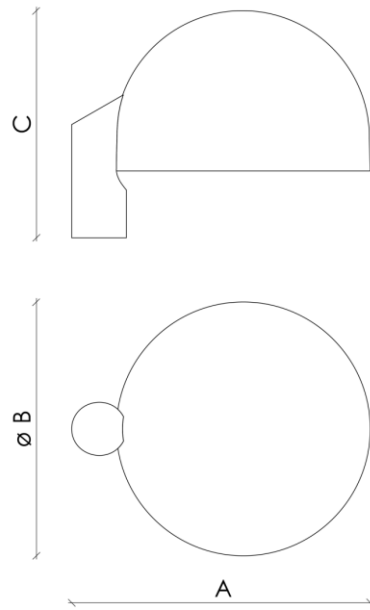
Approvals

UL	Yes
International EPD System	Yes

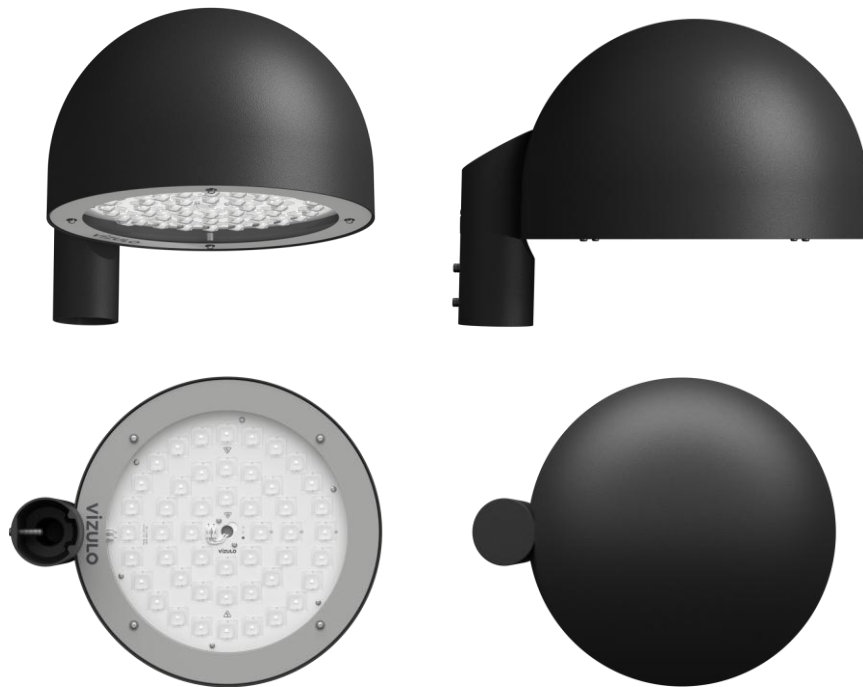
Light distribution

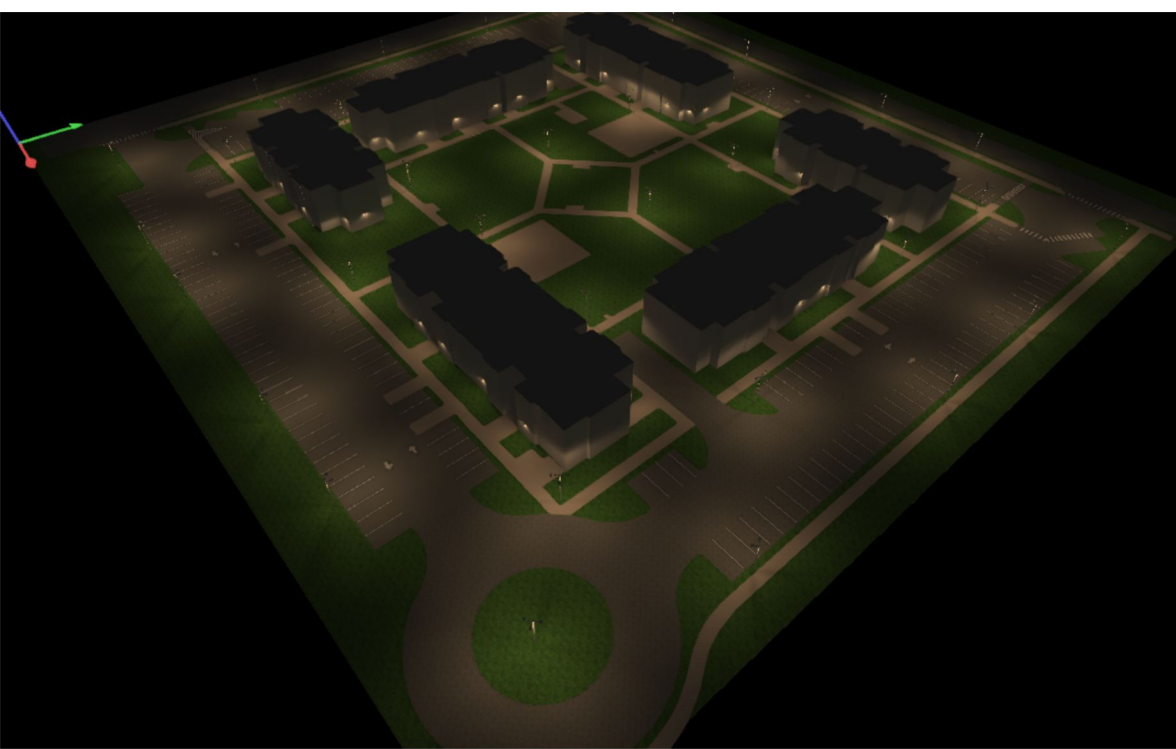


Dimensions



Product images





West Mesa Ridge- Photometric Site Plan



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Calculation surface 18 / Light scene 1 / Perpendicular illuminance 25



Luminaire list

Φ_{total} 333943 lm	P_{total} 2279.0 W	Luminous efficacy 146.5 lm/W
------------------------------------	--------------------------------	---------------------------------

pcs.	Manufacturer	Article No.	Article name	P	Φ	Luminous efficacy
51	Vizulo	BBFE 007 730 L35 AA008	Blackbird 7 W 8 LED	7.0 W	956 lm	136.6 lm/W
17	Vizulo	BBPE 016 730 L35 AA016	Blackbird 16 W 16 LED	16.0 W	2336 lm	146.0 lm/W
75	Vizulo	BBPE 022 730 L35 AA024	Blackbird 22 W 24 LED	22.0 W	3273 lm	148.8 lm/W

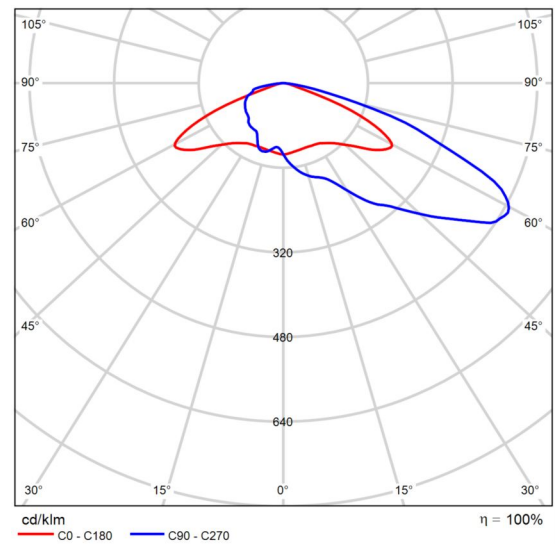


Product data sheet

Vizulo - Blackbird 7 W 8 LED



Article No.	BBFE 007 730 L35 AA008
P	7.0 W
Φ_{Lamp}	956 lm
$\Phi_{\text{Luminaire}}$	956 lm
η	100.01 %
Luminous efficacy	136.6 lm/W
CCT	3000 K
CRI	70



Polar LDC

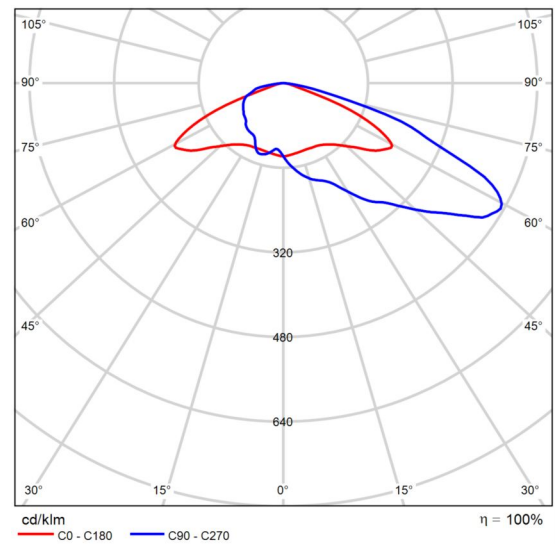


Product data sheet

Vizulo - Blackbird 16 W 16 LED



Article No.	BBPE 016 730 L35 AA016
P	16.0 W
Φ_{Lamp}	2336 lm
$\Phi_{\text{Luminaire}}$	2336 lm
η	100.01 %
Luminous efficacy	146.0 lm/W
CCT	3000 K
CRI	70



Polar LDC

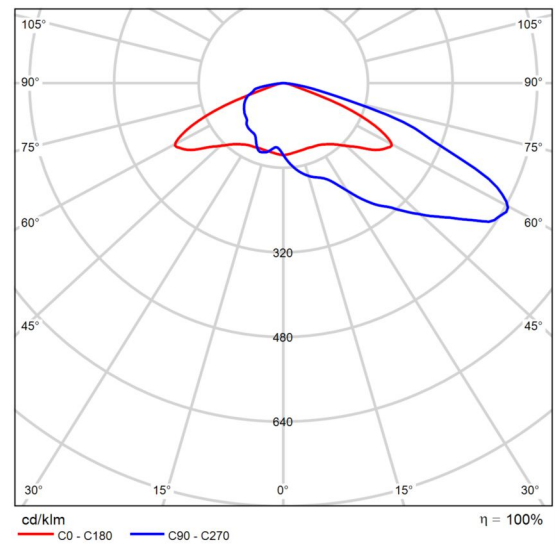


Product data sheet

Vizulo - Blackbird 22 W 24 LED



Article No.	BBPE 022 730 L35 AA024
P	22.0 W
Φ_{Lamp}	3273 lm
$\Phi_{\text{Luminaire}}$	3273 lm
η	100.01 %
Luminous efficacy	148.8 lm/W
CCT	3000 K
CRI	70



Polar LDC

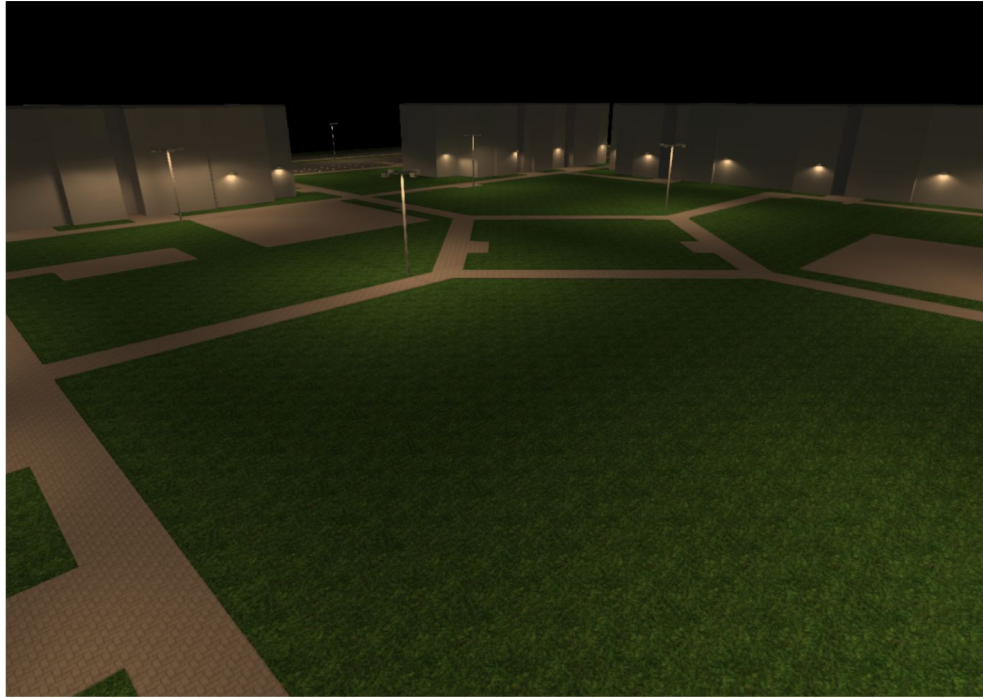


Site 1
Images



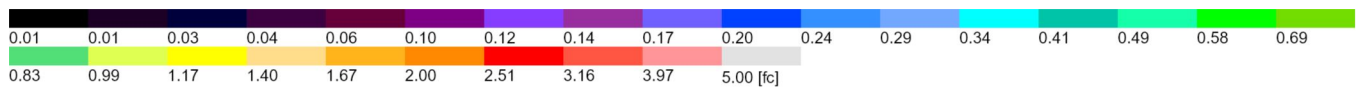
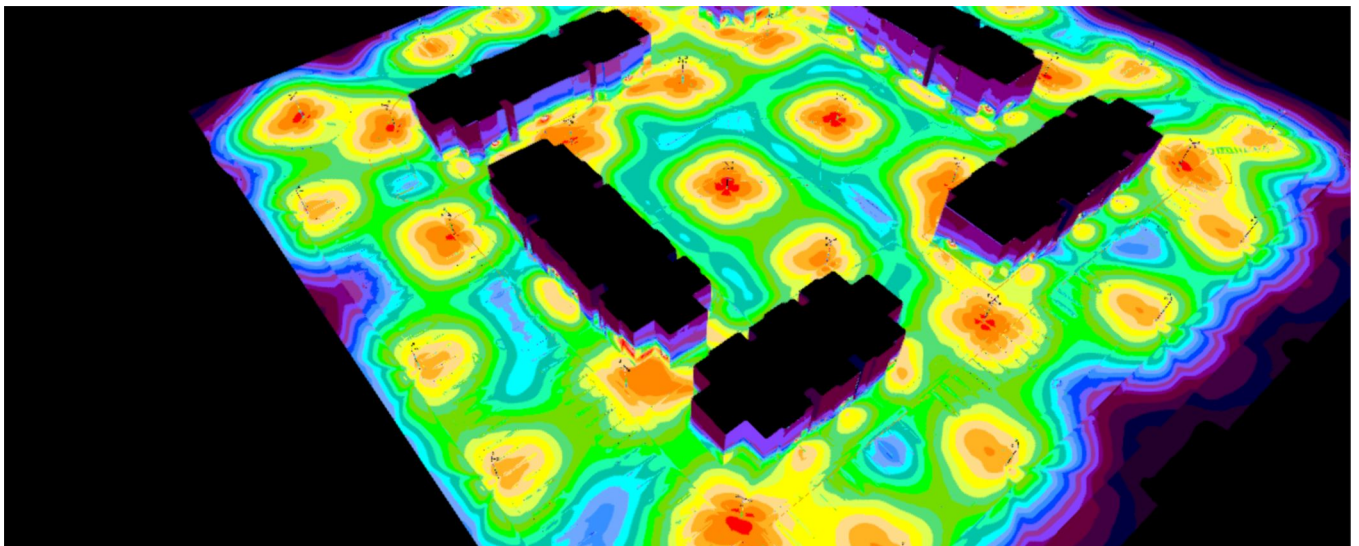
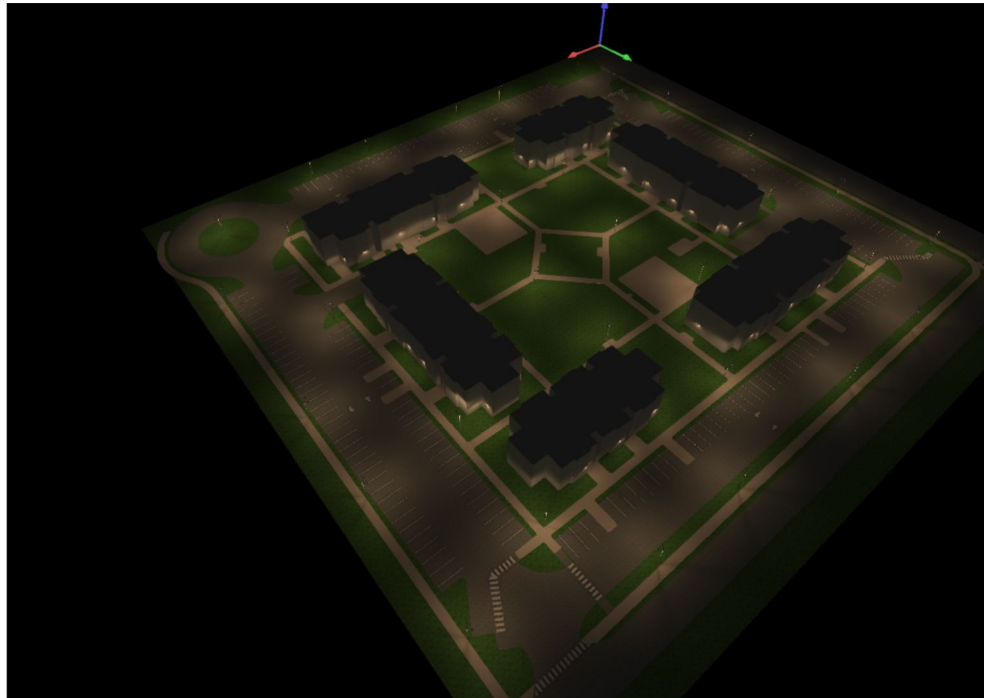


Site 1
Images



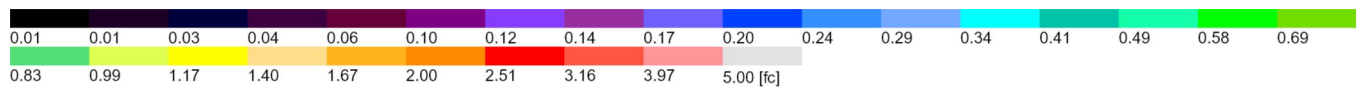
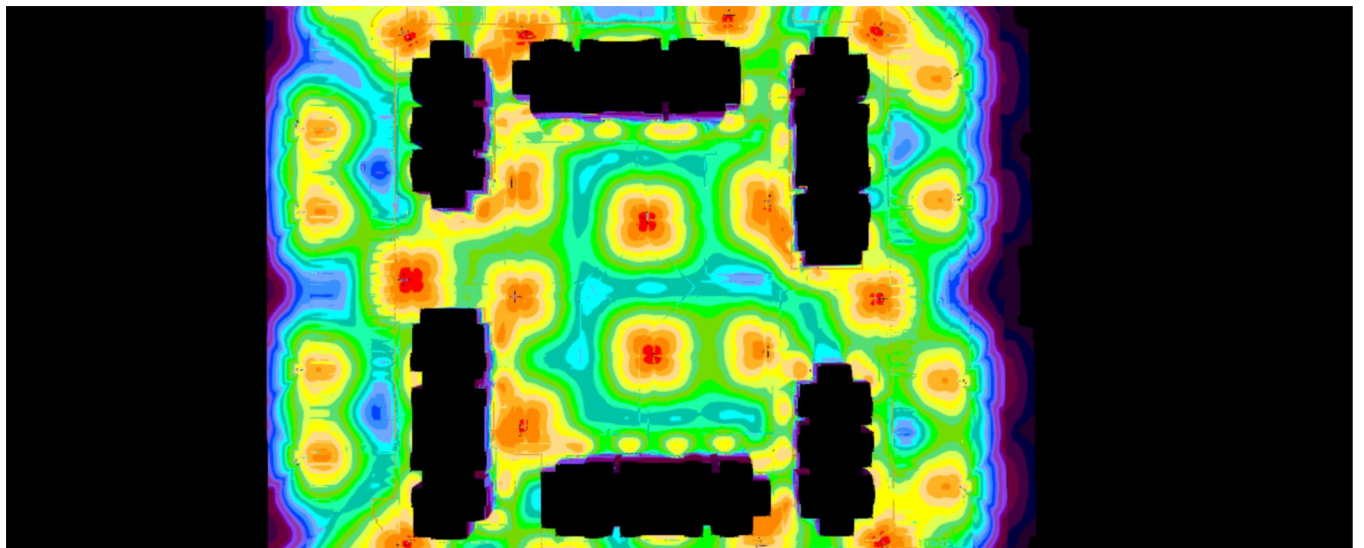


Site 1 Images

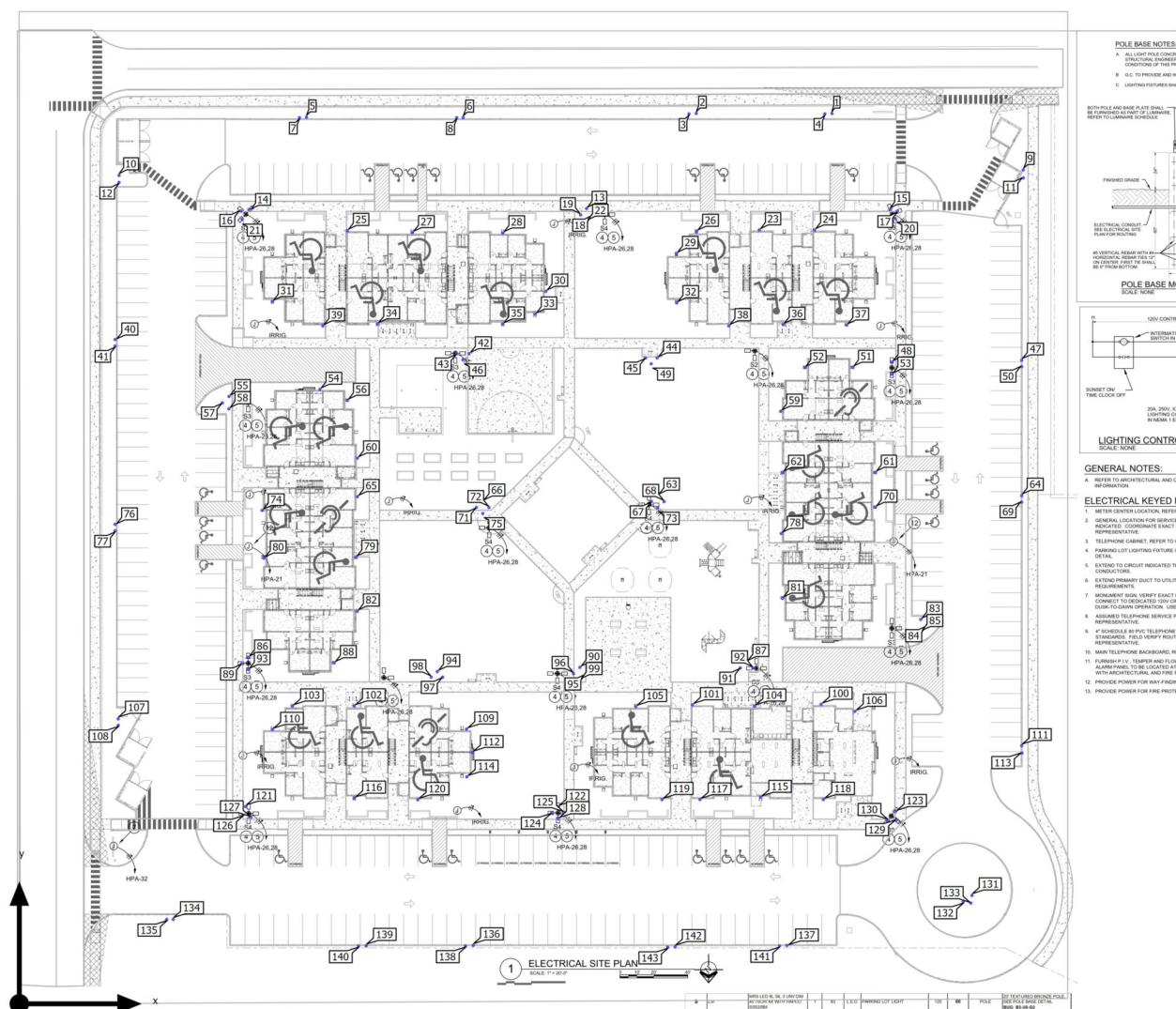




Site 1 Images



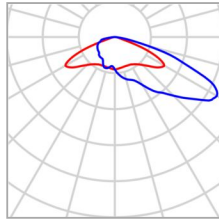
Luminaire layout plan





Site 1

Luminaire layout plan



Manufacturer	Vizulo	P	7.0 W
Article No.	BBFE 007 730 L35 AA008	$\Phi_{\text{Luminaire}}$	956 lm
Article name	Blackbird 7 W 8 LED		
Fitting	1x 8 LED MOD AA		

Individual luminaires

X	Y	Mounting height	Luminaire
435.321 ft	455.113 ft	10.600 ft	23
467.713 ft	455.113 ft	10.600 ft	24
192.944 ft	454.752 ft	10.600 ft	25
398.358 ft	454.234 ft	10.600 ft	26
231.246 ft	453.590 ft	10.600 ft	27
284.401 ft	453.289 ft	10.600 ft	28
386.525 ft	441.244 ft	10.600 ft	29
309.734 ft	418.985 ft	10.600 ft	30
148.860 ft	412.959 ft	10.600 ft	31
386.774 ft	412.249 ft	10.600 ft	32
303.476 ft	405.560 ft	10.600 ft	33
210.696 ft	399.843 ft	10.600 ft	34
284.318 ft	399.726 ft	10.600 ft	35



Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
449.257 ft	399.494 ft	10.600 ft	36
486.715 ft	399.171 ft	10.600 ft	37
417.339 ft	398.676 ft	10.600 ft	38
178.519 ft	398.666 ft	10.600 ft	39
490.201 ft	374.328 ft	10.600 ft	51
461.996 ft	374.140 ft	10.600 ft	52
176.826 ft	361.388 ft	10.600 ft	54
192.964 ft	354.868 ft	10.600 ft	56
447.856 ft	348.421 ft	10.600 ft	59
198.843 ft	320.915 ft	10.600 ft	60
503.566 ft	312.561 ft	10.600 ft	61
448.864 ft	312.471 ft	10.600 ft	62
198.843 ft	298.252 ft	10.600 ft	65
503.463 ft	291.998 ft	10.600 ft	70
142.819 ft	290.168 ft	10.600 ft	74
448.198 ft	276.571 ft	10.600 ft	78
197.892 ft	262.603 ft	10.600 ft	79
143.967 ft	262.098 ft	10.600 ft	80
448.864 ft	238.511 ft	10.600 ft	81
198.758 ft	230.876 ft	10.600 ft	82
185.219 ft	200.530 ft	10.600 ft	88
471.633 ft	176.100 ft	10.600 ft	100
395.888 ft	175.823 ft	10.600 ft	101
196.980 ft	175.147 ft	10.600 ft	102



Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
160.639 ft	175.072 ft	10.600 ft	103
432.495 ft	175.036 ft	10.600 ft	104
362.617 ft	174.767 ft	10.600 ft	105
491.559 ft	171.979 ft	10.600 ft	106
263.029 ft	161.517 ft	10.600 ft	109
148.810 ft	161.294 ft	10.600 ft	110
266.374 ft	147.824 ft	10.600 ft	112
263.211 ft	133.495 ft	10.600 ft	114
436.018 ft	121.427 ft	10.600 ft	115
197.070 ft	120.864 ft	10.600 ft	116
400.346 ft	120.115 ft	10.600 ft	117
472.980 ft	120.115 ft	10.600 ft	118
378.055 ft	120.094 ft	10.600 ft	119
234.392 ft	120.005 ft	10.600 ft	120



Site 1

Luminaire layout plan



Manufacturer	Vizulo	P	16.0 W
Article No.	BBPE 016 730 L35 AA016	$\Phi_{\text{Luminaire}}$	2336 lm
Article name	Blackbird 16 W 16 LED		
Fitting	1x 16 LED MOD AA		

Individual luminaires

X	Y	Mounting height	Luminaire
337.366 ft	463.994 ft	20.000 ft	18
330.190 ft	463.936 ft	20.000 ft	19
333.634 ft	460.308 ft	20.000 ft	22
375.206 ft	379.903 ft	20.000 ft	44
368.365 ft	379.826 ft	20.000 ft	45
260.955 ft	378.779 ft	20.000 ft	46
375.591 ft	299.056 ft	20.000 ft	63
272.619 ft	295.605 ft	20.000 ft	66
379.276 ft	295.324 ft	20.000 ft	68
268.867 ft	291.940 ft	20.000 ft	71
427.840 ft	201.222 ft	20.000 ft	87
329.750 ft	197.847 ft	20.000 ft	90
245.864 ft	195.384 ft	20.000 ft	94



Site 1

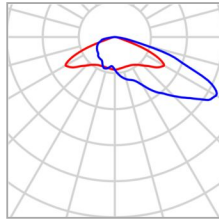
Luminaire layout plan

X	Y	Mounting height	Luminaire
333.423 ft	194.186 ft	20.000 ft	95
326.018 ft	194.161 ft	20.000 ft	96
329.809 ft	190.619 ft	20.000 ft	99
316.885 ft	115.985 ft	20.000 ft	122



Site 1

Luminaire layout plan



Manufacturer	Vizulo	P	22.0 W
Article No.	BBPE 022 730 L35 AA024	$\Phi_{\text{Luminaire}}$	3273 lm
Article name	Blackbird 22 W 24 LED		
Fitting	1x 24 LED MOD AA		

Individual luminaires

X	Y	Mounting height	Luminaire
478.043 ft	523.632 ft	20.000 ft	1
398.229 ft	523.626 ft	20.000 ft	2
393.940 ft	523.381 ft	20.000 ft	3
473.818 ft	523.381 ft	20.000 ft	4
168.917 ft	521.357 ft	20.000 ft	5
261.081 ft	521.137 ft	20.000 ft	6
164.767 ft	521.130 ft	20.000 ft	7
257.286 ft	521.130 ft	20.000 ft	8
590.545 ft	490.377 ft	20.000 ft	9
58.681 ft	487.199 ft	20.000 ft	10
590.633 ft	485.702 ft	20.000 ft	11
58.623 ft	483.077 ft	20.000 ft	12
333.681 ft	467.726 ft	20.000 ft	13



Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
135.387 ft	467.159 ft	20.000 ft	14
512.098 ft	467.088 ft	20.000 ft	15
130.092 ft	466.275 ft	20.000 ft	16
516.492 ft	466.188 ft	20.000 ft	17
515.310 ft	461.681 ft	19.900 ft	20
131.056 ft	461.269 ft	20.000 ft	21
56.310 ft	390.681 ft	20.000 ft	40
56.317 ft	386.886 ft	20.000 ft	41
264.569 ft	382.346 ft	20.000 ft	42
257.163 ft	382.322 ft	20.000 ft	43
589.647 ft	378.532 ft	20.000 ft	47
513.263 ft	377.458 ft	20.000 ft	48
371.714 ft	376.385 ft	20.000 ft	49
589.655 ft	374.737 ft	20.000 ft	50
513.322 ft	370.230 ft	20.000 ft	53
123.325 ft	357.155 ft	20.000 ft	55
119.454 ft	353.427 ft	20.000 ft	57
123.246 ft	349.884 ft	20.000 ft	58
589.647 ft	298.810 ft	20.000 ft	64
371.859 ft	295.371 ft	20.000 ft	67
589.655 ft	295.015 ft	20.000 ft	69
276.273 ft	291.924 ft	20.000 ft	72
375.544 ft	291.639 ft	20.000 ft	73
272.640 ft	288.377 ft	20.000 ft	75



Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
56.310 ft	281.972 ft	20.000 ft	76
56.317 ft	278.177 ft	20.000 ft	77
530.275 ft	226.052 ft	20.000 ft	83
534.042 ft	222.552 ft	20.000 ft	84
530.334 ft	218.824 ft	20.000 ft	85
134.711 ft	203.787 ft	20.000 ft	86
130.840 ft	200.060 ft	20.000 ft	89
424.108 ft	197.537 ft	20.000 ft	91
431.525 ft	197.490 ft	20.000 ft	92
134.632 ft	196.517 ft	20.000 ft	93
249.004 ft	192.138 ft	20.000 ft	97
242.287 ft	192.108 ft	20.000 ft	98
58.166 ft	167.578 ft	20.000 ft	107
58.173 ft	163.783 ft	20.000 ft	108
589.647 ft	151.791 ft	20.000 ft	111
589.838 ft	147.460 ft	20.000 ft	113
133.158 ft	115.989 ft	20.000 ft	121
515.302 ft	113.511 ft	20.000 ft	123
313.153 ft	112.299 ft	20.000 ft	124
320.271 ft	112.289 ft	20.000 ft	125
131.709 ft	111.198 ft	20.000 ft	126
136.251 ft	109.792 ft	20.000 ft	127
316.945 ft	108.756 ft	20.000 ft	128
515.896 ft	107.970 ft	20.000 ft	129



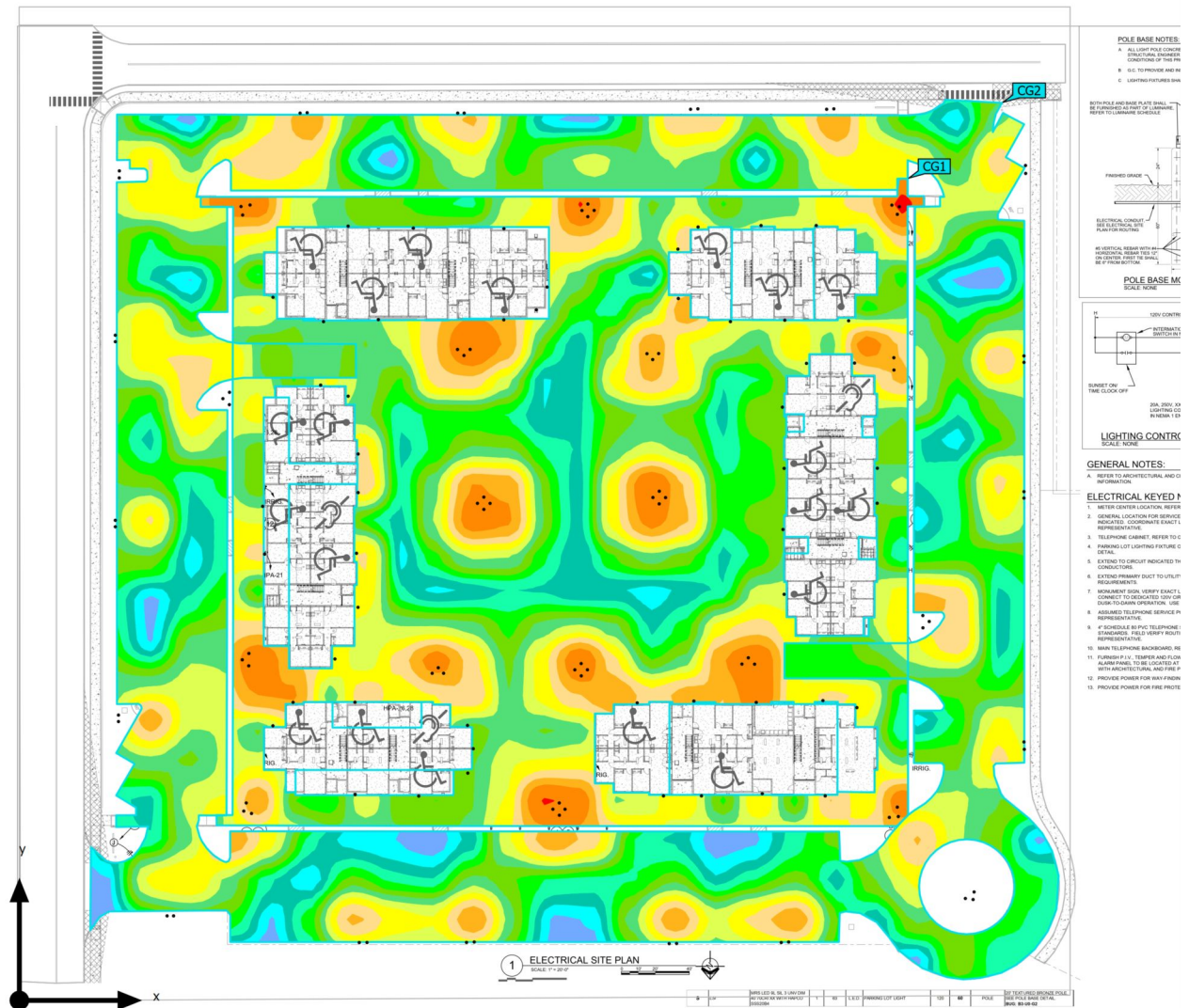
Site 1

Luminaire layout plan

X	Y	Mounting height	Luminaire
510.608 ft	107.479 ft	20.000 ft	130
560.375 ft	63.699 ft	20.000 ft	131
555.241 ft	59.872 ft	20.000 ft	132
559.771 ft	59.246 ft	20.000 ft	133
90.507 ft	49.646 ft	20.000 ft	134
86.712 ft	49.639 ft	20.000 ft	135
266.986 ft	34.303 ft	20.000 ft	136
451.510 ft	34.303 ft	20.000 ft	137
262.446 ft	34.065 ft	20.000 ft	138
204.040 ft	34.010 ft	20.000 ft	139
199.496 ft	34.003 ft	20.000 ft	140
447.166 ft	34.000 ft	20.000 ft	141
385.751 ft	33.418 ft	20.000 ft	142
381.382 ft	33.344 ft	20.000 ft	143

Site 1 (Light scene 1)

Calculation objects





Site 1 (Light scene 1)

Calculation objects

Calculation surfaces

Properties	$\bar{E}$	E_{min}	E_{max}	$\bar{E}/E_{min}$	E_{max}/E_{min}	Index
Calculation surface 17 Perpendicular illuminance Height: 0.000 ft	1.09 fc	0.37 fc	2.66 fc	2.93	7.17	CG1
Calculation surface 18 Perpendicular illuminance Height: 0.000 ft	0.87 fc	0.30 fc	1.97 fc	2.95	6.63	CG2

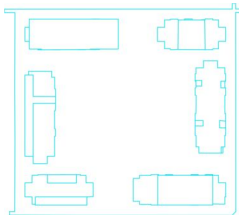
Utilisation profile: 22 - LIGHTING FOR COMMON APPLICATIONS (Building Entries /Outdoor; Non-covered Entries/Exits, Immediate Exterior, Paths to Curb, High Activity, LZ1)

Notes on planning:

The results were calculated without consideration of objects and furniture. No results were determined on their surfaces.

Site 1 (Light scene 1)

Calculation surface 17

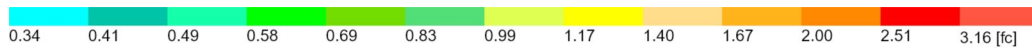
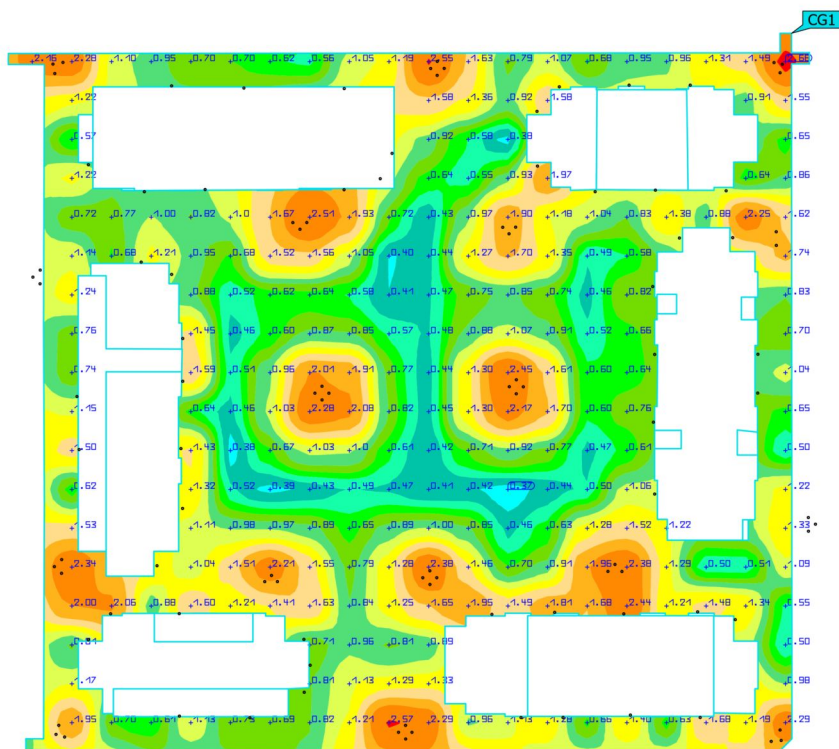


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Properties	$\bar{E}$	E_{min}	E_{max}	$\bar{E}/E_{min}$	E_{max}/E_{min}	Index
Calculation surface 17	1.09 fc	0.37 fc	2.66 fc	2.93	7.17	CG1
Perpendicular illuminance						
Height: 0.000 ft						



Site 1 (Light scene 1)

Calculation surface 17

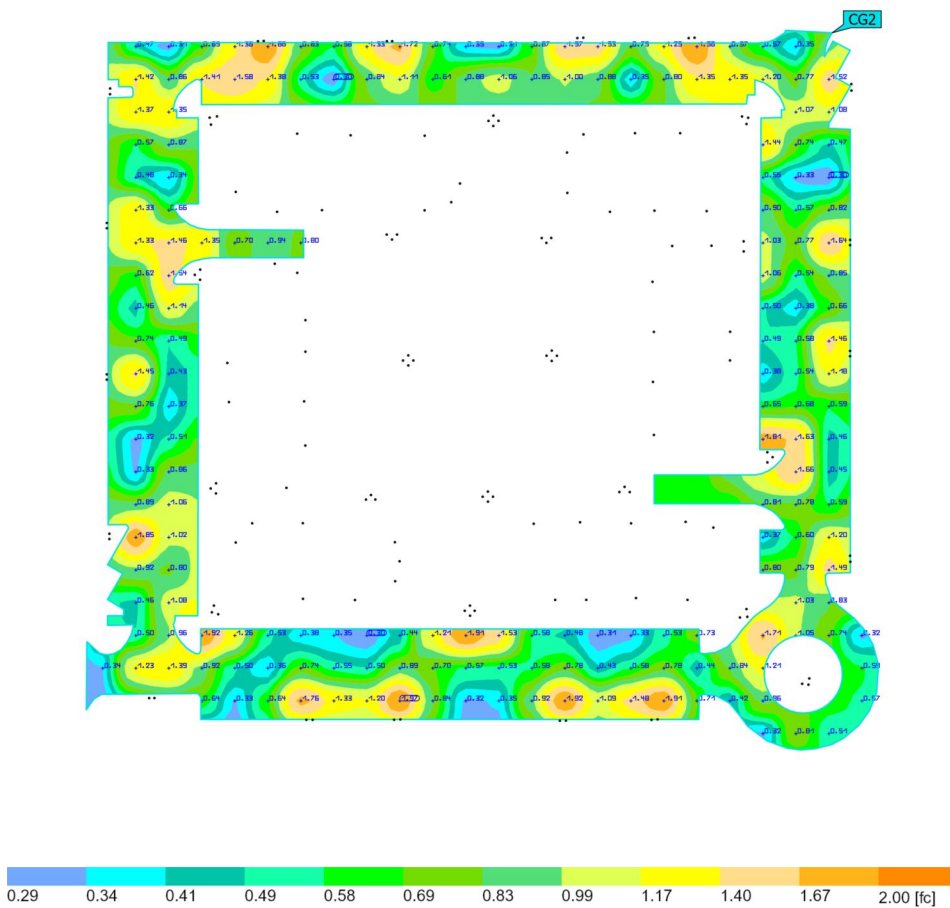
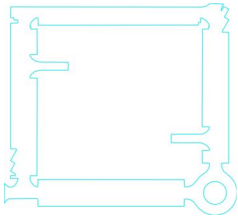
Utilisation profile: 22 - LIGHTING FOR COMMON APPLICATIONS (Building Entries /Outdoor; Non-covered Entries/Exits, Immediate Exterior, Paths to Curb, High Activity, LZ1)

Notes on planning:

The results were calculated without consideration of objects and furniture. No results were determined on their surfaces.

Site 1 (Light scene 1)

Calculation surface 18



Properties	$\bar{E}$	E_{min}	E_{max}	$\bar{E}/E_{min}$	E_{max}/E_{min}	Index
Calculation surface 18	0.87 fc	0.30 fc	1.97 fc	2.95	6.63	CG2
Perpendicular illuminance						
Height: 0.000 ft						



Site 1 (Light scene 1)

Calculation surface 18

Utilisation profile: 22 - LIGHTING FOR COMMON APPLICATIONS (Building Entries /Outdoor; Non-covered Entries/Exits, Immediate Exterior, Paths to Curb, High Activity, LZ1)

Notes on planning:

The results were calculated without consideration of objects and furniture. No results were determined on their surfaces.