

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P824213

Luminaire Tested: CB2-D-085U-085D-840-1D-UNV-STD-W-4

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P824213
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2312-242-13, G2-2312-242-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/12/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: CB2-D-085U-085D-840-1D-UNV-STD-W-4
Description: CORELITE Bryx SLOT LED LUMINAIRE, UPLIGHT DIFFUSER DUST COVER
2-INCH APERTURE
DOWNLIGHT 850 LUMENS PER FOOT
UPLIGHT 850 LUMENS PER FOOT
Light Source: 80 CRI, 4000K CCT LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6643.2 lumens
Efficiency: N/A
Efficacy: 124.6 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: General Diffuse

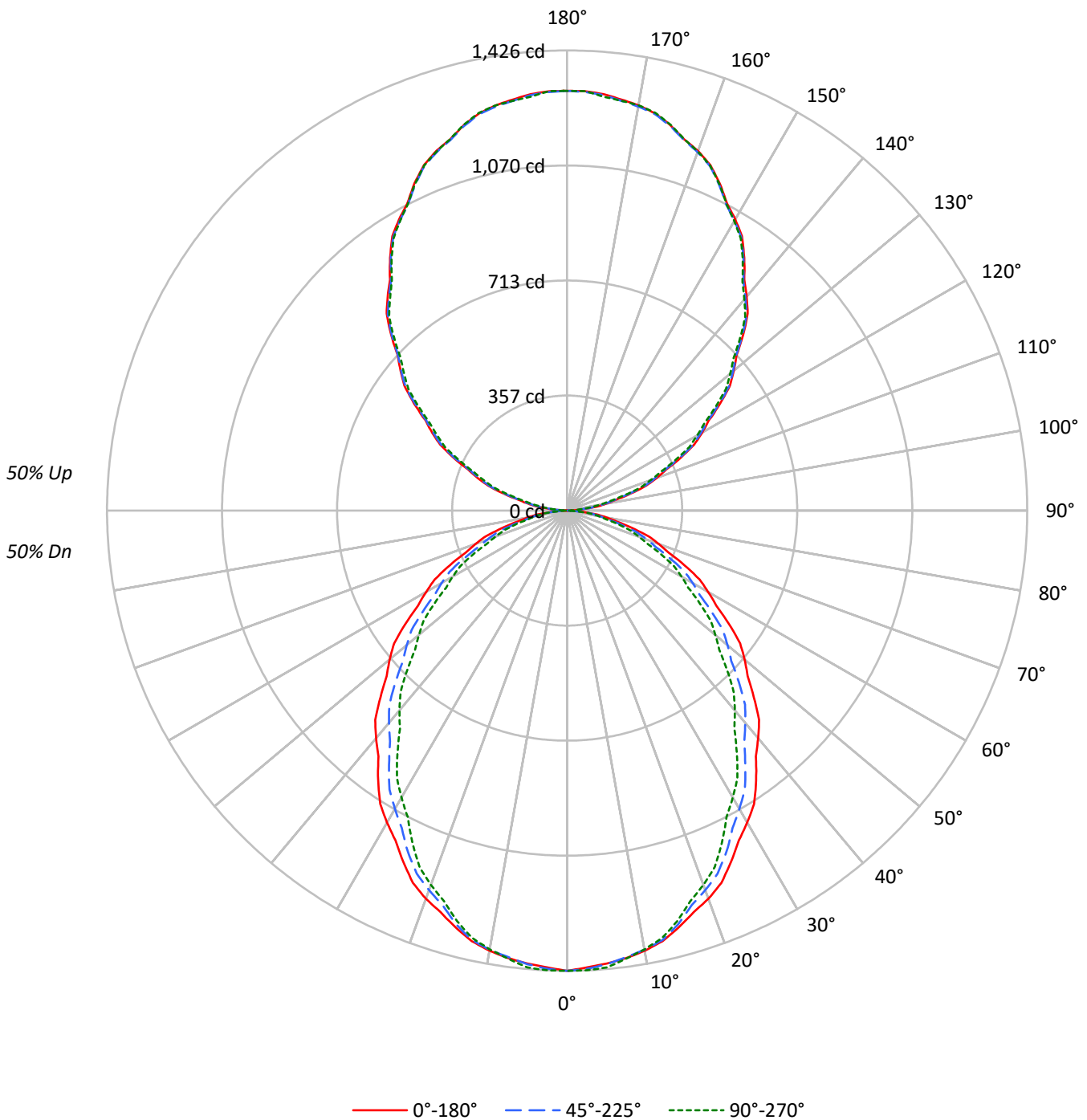
Input Watts (W): 53.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50																				
1	98	94	90	86	90	87	83	80	73	71	69	61	60	58	50	49	48	43																				
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	41	36																				
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35	31																				
4	75	64	56	50	69	59	53	47	51	46	41	43	39	36	35	32	30	26																				
5	69	57	49	43	63	53	46	41	46	40	36	38	34	31	32	29	26	23																				
6	63	51	43	38	58	48	41	35	41	36	31	35	31	27	29	26	23	20																				
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	27	23	21	18																				
8	54	42	35	29	50	39	33	28	34	29	25	29	25	22	24	21	19	16																				
9	51	39	31	26	47	36	29	25	31	26	22	27	23	20	23	19	17	15																				
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	24844	24844	24844
5°	24633	24671	24845
10°	24493	24435	24416
15°	24107	23948	23751
20°	23727	23200	22876
25°	23088	22439	21808
30°	22449	21461	20649
35°	21713	20459	19485
40°	20934	19519	18376
45°	20151	18535	17299
50°	19444	17580	16247
55°	18572	16583	15256
60°	17578	15637	14268
65°	16518	14585	13279
70°	15349	13403	12013
75°	13964	12127	10875
80°	12488	10622	9860
85°	9612	8733	7194

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20151 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.1	2.0
10°-20°	373.9	5.6
20°-30°	537.6	8.1
30°-40°	604.3	9.1
40°-50°	583.7	8.8
50°-60°	493.2	7.4
60°-70°	354.3	5.3
70°-80°	193.6	2.9
80°-90°	51.5	0.8
90°-100°	50.2	0.8
100°-110°	207.2	3.1
110°-120°	376.2	5.7
120°-130°	511.9	7.7
130°-140°	590.9	8.9
140°-150°	595.5	9.0
150°-160°	513.9	7.7
160°-170°	348.3	5.2
170°-180°	122.9	1.8
0°-30°	1045.7	15.7
0°-40°	1650.0	24.8
0°-60°	2726.9	41.0
0°-90°	3326.3	50.1
90°-120°	633.6	9.5
90°-150°	2331.8	35.1
90°-180°	3317.0	49.9
0°-180°	6643.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1426	1426	1426	1426	1426	
5°	1409	1428	1411	1411	1421	134
15°	1337	1349	1328	1315	1317	377
25°	1201	1202	1168	1141	1135	553
35°	1021	1010	962	925	916	638
45°	818	801	752	713	702	632
55°	612	589	546	512	502	547
65°	401	386	354	329	322	397
75°	208	195	180	166	162	222
85°	48	45	44	38	36	57
90°	0	0	1	0	1	4
95°	49	43	41	31	31	57
105°	205	202	197	186	184	217
115°	390	389	381	370	369	384
125°	579	585	573	561	562	517
135°	772	781	768	754	759	595
145°	957	968	953	942	948	598
155°	1119	1130	1114	1107	1116	515
165°	1237	1250	1234	1227	1238	348
175°	1296	1309	1292	1284	1287	123
180°	1301	1301	1301	1301	1301	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1426.4	1426.4	1426.4	1426.4	1426.4
2.5°	1416.8	1433.9	1421.2	1423.0	1425.5
5°	1408.9	1428.2	1411.1	1411.3	1421.0
7.5°	1398.9	1417.1	1395.6	1391.7	1400.6
10°	1384.9	1403.1	1381.6	1374.1	1380.5
12.5°	1366.6	1383.9	1363.3	1351.4	1357.0
15°	1336.9	1348.6	1328.1	1315.1	1317.2
17.5°	1304.5	1311.8	1282.2	1271.3	1269.1
20°	1280.1	1286.5	1251.7	1236.3	1234.2
22.5°	1248.6	1254.2	1217.6	1198.7	1195.7
25°	1201.4	1202.5	1167.6	1141.2	1134.8
27.5°	1152.1	1148.6	1109.9	1078.7	1070.4
30°	1116.2	1112.0	1067.1	1034.1	1026.7
32.5°	1077.8	1070.1	1025.1	989.6	982.1
35°	1021.2	1009.5	962.2	924.9	916.4
37.5°	960.9	947.7	901.3	860.7	851.0
40°	920.7	905.8	858.5	817.8	808.2
42.5°	880.5	863.9	815.7	775.0	764.5
45°	818.1	801.0	752.5	713.0	702.3
47.5°	758.6	736.9	689.8	650.5	639.8
50°	717.6	694.1	648.8	610.3	599.6
52.5°	675.6	651.3	607.7	571.0	560.3
55°	611.6	589.2	546.1	512.0	502.4
57.5°	548.3	526.7	487.3	454.8	445.4
60°	504.6	486.4	448.9	418.1	409.6
62.5°	462.7	446.2	410.5	382.3	373.8
65°	400.8	385.9	353.9	328.6	322.2
67.5°	340.8	325.8	299.9	277.3	270.0
70°	301.4	286.5	263.2	242.3	235.9
72.5°	263.9	248.1	229.1	210.0	205.3
75°	207.5	194.7	180.2	165.9	161.6
77.5°	157.7	145.3	134.8	124.7	123.6
80°	124.5	113.8	105.9	99.4	98.3
82.5°	93.1	84.9	79.7	74.9	74.7
85°	48.1	44.9	43.7	38.2	36.0
87.5°	14.0	14.0	12.4	10.5	10.7
90°	0.0	0.0	1.0	0.0	1.0
92.5°	12.2	10.6	9.9	6.5	7.5
95°	48.7	42.7	40.6	31.4	31.4
97.5°	91.9	86.0	82.8	73.4	71.4
100°	122.8	116.8	113.6	103.4	101.4
102.5°	154.4	151.6	146.1	135.1	133.1
105°	204.9	201.9	196.8	185.6	183.6
107.5°	256.9	257.5	249.8	240.6	237.8
110°	294.2	293.2	287.1	277.9	275.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	332.3	330.6	324.4	315.3	313.3
115°	389.6	388.6	381.4	370.3	369.3
117.5°	443.9	447.1	438.7	426.9	426.5
120°	482.9	486.9	476.8	466.6	464.6
122.5°	521.0	525.8	515.8	504.0	504.4
125°	579.3	585.2	573.2	561.0	562.0
127.5°	635.5	642.8	631.6	619.3	620.5
130°	673.6	682.5	670.6	657.4	659.4
132.5°	712.6	721.5	709.5	695.6	699.2
135°	772.0	780.9	768.0	753.9	758.8
137.5°	828.0	836.9	822.7	810.9	816.9
140°	865.3	874.3	859.3	848.2	854.2
142.5°	901.9	912.4	896.6	884.8	892.3
145°	956.6	967.6	952.6	941.6	948.5
147.5°	1008.6	1019.5	1004.3	993.7	1000.9
150°	1041.9	1052.8	1036.8	1027.8	1035.8
152.5°	1072.7	1085.2	1068.4	1059.5	1069.9
155°	1119.0	1129.9	1113.9	1107.0	1115.9
157.5°	1159.1	1171.8	1155.9	1150.0	1157.1
160°	1185.9	1197.8	1181.9	1176.0	1183.9
162.5°	1206.2	1218.9	1203.8	1197.1	1206.6
165°	1236.6	1249.5	1233.6	1226.7	1237.7
167.5°	1260.6	1274.3	1258.2	1251.1	1262.2
170°	1275.2	1288.1	1271.1	1263.3	1275.2
172.5°	1284.9	1298.6	1280.9	1272.9	1280.9
175°	1295.5	1309.4	1292.4	1284.4	1287.4
177.5°	1300.6	1311.7	1298.1	1291.0	1300.6
180°	1300.6	1300.6	1300.6	1300.6	1300.6

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	18.17	19.02	19.13	19.99	21.26	17.07	17.92	18.03	18.89	20.16
	3H	19.81	20.58	20.78	21.56	22.85	18.60	19.36	19.57	20.34	21.63
	4H	20.44	21.16	21.43	22.15	23.45	19.17	19.89	20.15	20.88	22.18
	6H	20.84	21.51	21.84	22.50	23.81	19.54	20.20	20.53	21.19	22.51
	8H	20.99	21.62	21.99	22.63	23.94	19.68	20.31	20.68	21.32	22.63
	12H	21.07	21.67	22.07	22.67	24.00	19.74	20.34	20.75	21.34	22.68
4H	2H	18.58	19.30	19.57	20.28	21.59	17.70	18.42	18.69	19.41	20.71
	3H	20.45	21.05	21.44	22.06	23.38	19.44	20.04	20.44	21.05	22.37
	4H	21.19	21.74	22.20	22.75	24.09	20.11	20.66	21.12	21.67	23.01
	6H	21.71	22.18	22.73	23.21	24.55	20.58	21.06	21.60	22.09	23.42
	8H	21.91	22.36	22.93	23.38	24.73	20.77	21.22	21.79	22.24	23.59
	12H	22.02	22.42	23.06	23.46	24.81	20.86	21.26	21.90	22.30	23.66
8H	4H	21.35	21.79	22.37	22.81	24.16	20.38	20.82	21.40	21.85	23.20
	6H	21.99	22.35	23.03	23.42	24.77	20.99	21.35	22.03	22.42	23.77
	8H	22.28	22.60	23.33	23.65	25.02	21.26	21.58	22.31	22.63	24.00
	12H	22.45	22.73	23.51	23.78	25.19	21.41	21.69	22.47	22.74	24.15
12H	4H	21.33	21.72	22.36	22.76	24.12	20.39	20.78	21.42	21.82	23.18
	6H	22.02	22.34	23.07	23.39	24.76	21.05	21.37	22.10	22.42	23.79
	8H	22.33	22.62	23.39	23.66	25.07	21.35	21.64	22.41	22.68	24.09