

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: P824228

Luminaire Tested: CB2R-085D-840-1D-UNV-STD-W-4

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P824228
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: CB2R-085D-840-1D-UNV-STD-W-4
Description: CORELITE BRYX SLOT LED LUMINAIRE
2-INCH APERTURE
DOWNLIGHT 850 LUMENS PER FOOT
DIRECT ONLY
Light Source: 80 CRI, 4000K CCT LEDS
Ballast/Driver: -

Summary

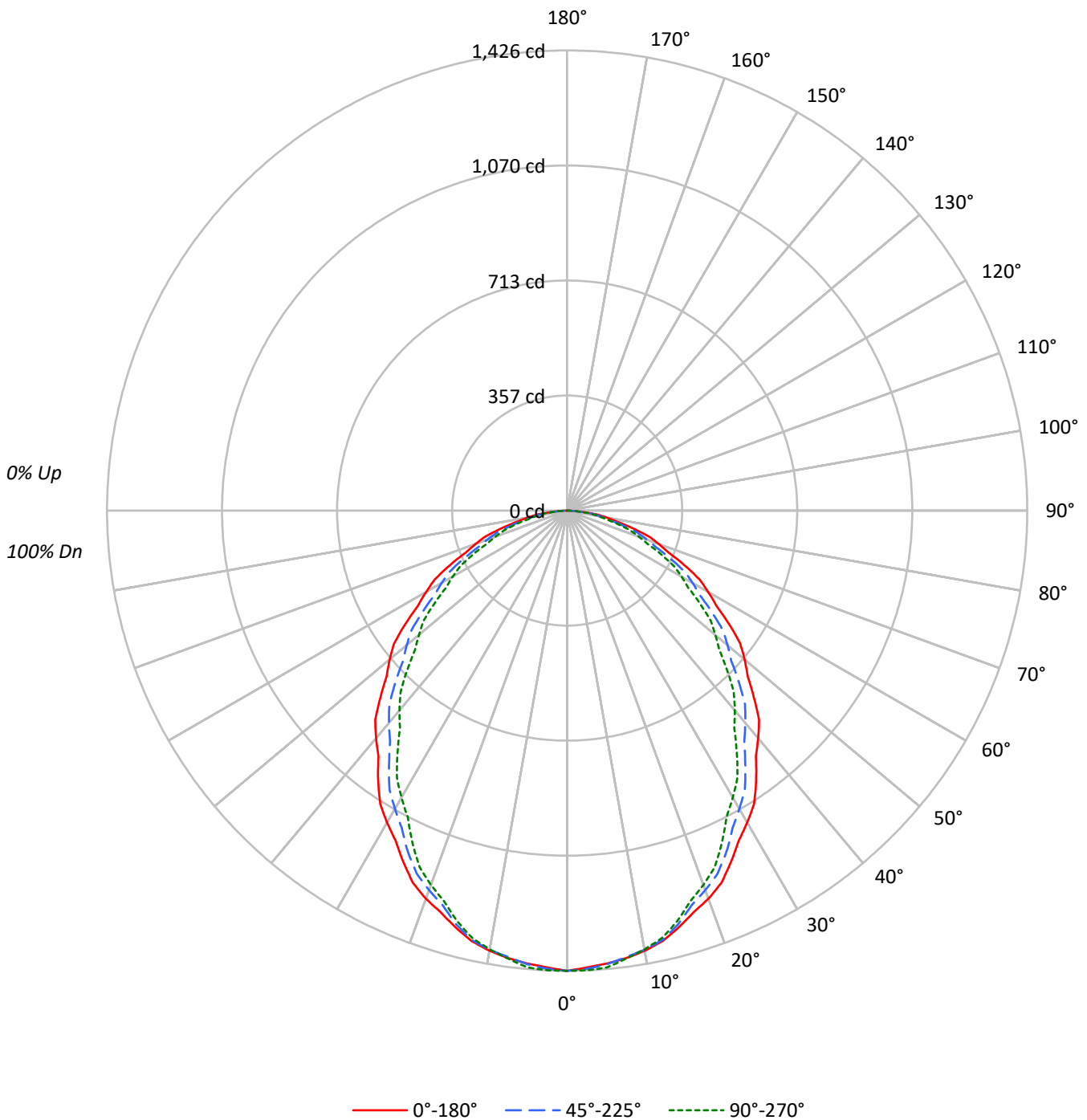
Lumens per Lamp: N/A
Luminaire Lumens: 3326.3 lumens
Efficiency: N/A
Efficacy: 115.1 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 28.9
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					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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72					72			
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61					61			
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53					53			
5	78	65	56	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33					33			
9	58	45	37	32	57	45	37	32	44	37	32	42	36	31	41	36	31	29					29			
10	55	42	34	29	54	41	34	29	40	34	29	39	33	29	39	33	29	27					27			

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	4.0
10°-20°	373.9	11.2
20°-30°	537.6	16.2
30°-40°	604.3	18.2
40°-50°	583.7	17.5
50°-60°	493.2	14.8
60°-70°	354.3	10.7
70°-80°	193.6	5.8
80°-90°	51.4	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1045.7	31.4
0°-40°	1650.0	49.6
0°-60°	2726.9	82.0
0°-90°	3326.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3326.3	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	59
90°	0	0	0	0	0	



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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	12.2	10.5	10.5
90°	0.0	0.0	0.0	0.0	0.0



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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	22.01	23.59	22.38	23.91	24.22	20.91	22.49	21.28	22.81	23.12
	3H	23.71	25.13	24.08	25.46	25.82	22.49	23.91	22.87	24.24	24.60
	4H	24.37	25.70	24.76	26.05	26.43	23.09	24.43	23.49	24.78	25.16
	6H	24.80	26.04	25.21	26.41	26.80	23.50	24.74	23.91	25.10	25.49
	8H	24.97	26.15	25.40	26.54	26.94	23.66	24.84	24.08	25.23	25.63
	12H	25.07	26.20	25.50	26.58	27.01	23.74	24.88	24.17	25.26	25.69
4H	2H	22.50	23.84	22.90	24.19	24.56	21.63	22.97	22.03	23.31	23.69
	3H	24.43	25.55	24.84	25.95	26.35	23.42	24.54	23.83	24.94	25.34
	4H	25.20	26.21	25.64	26.63	27.06	24.12	25.13	24.56	25.55	25.98
	6H	25.76	26.64	26.22	27.08	27.54	24.64	25.52	25.09	25.96	26.42
	8H	25.98	26.81	26.44	27.25	27.71	24.84	25.66	25.30	26.11	26.57
	12H	26.12	26.86	26.60	27.34	27.81	24.96	25.70	25.44	26.18	26.65
8H	4H	25.41	26.24	25.88	26.68	27.15	24.45	25.27	24.91	25.72	26.18
	6H	26.08	26.77	26.58	27.26	27.73	25.08	25.77	25.58	26.25	26.73
	8H	26.38	26.99	26.89	27.50	27.99	25.36	25.98	25.87	26.48	26.97
	12H	26.59	27.13	27.10	27.62	28.18	25.55	26.09	26.05	26.58	27.14
12H	4H	25.43	26.17	25.91	26.64	27.11	24.49	25.22	24.97	25.70	26.17
	6H	26.12	26.73	26.63	27.24	27.72	25.15	25.76	25.66	26.27	26.76
	8H	26.47	27.01	26.98	27.50	28.06	25.49	26.03	26.00	26.52	27.08