

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: P824227

Luminaire Tested: CB2R-085D-835-1D-UNV-STD-W-4

Issue Date: 4/12/2024

Test Information

Test Method: LM-79-2019
Report Number: P824227
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-835-1D-UNV-STD-W-4
Description: CORELITE BRYX SLOT LED LUMINAIRE
2-INCH APERTURE
DOWNLIGHT 850 LUMENS PER FOOT
DIRECT ONLY
Light Source: 80 CRI, 3500K CCT LEDS
Ballast/Driver: -

Summary

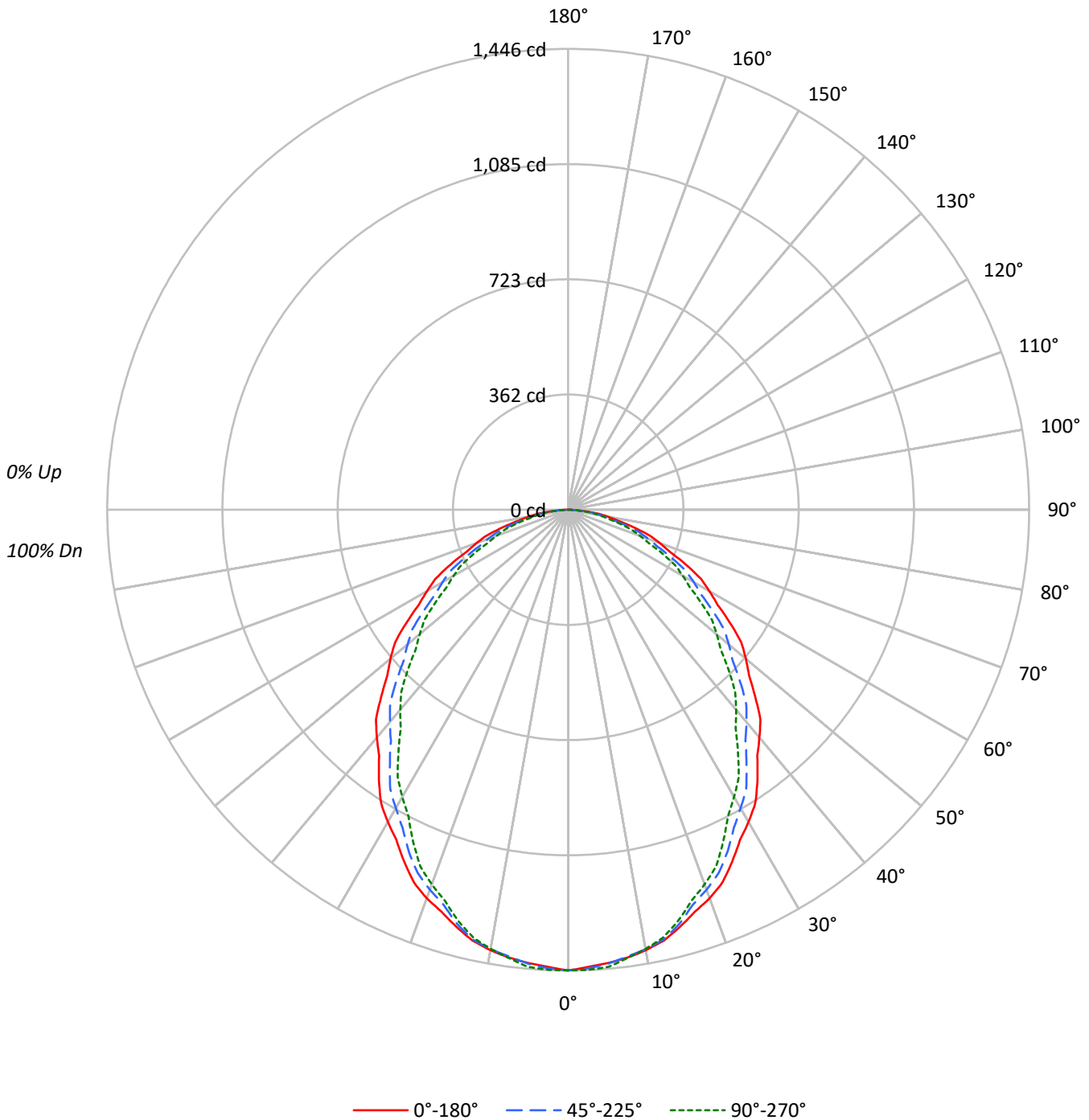
Lumens per Lamp: N/A
Luminaire Lumens: 3371.2 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.09 / 1.24
Luminous Opening: Rectangular (W 0.15' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P824227

CATALOG NUMBER: CB2R-085D-835-1D-UNV-STD-W-4

Luminous Intensity Polar Plot





TEST NUMBER: P824227

CATALOG NUMBER: CB2R-085D-835-1D-UNV-STD-W-4

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	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°	25180	25180	25180
5°	24967	25005	25180
10°	24824	24766	24746
15°	24431	24273	24072
20°	24047	23514	23186
25°	23402	22741	22103
30°	22752	21751	20926
35°	22007	20735	19747
40°	21218	19783	18626
45°	20422	18787	17533
50°	19707	17816	16467
55°	18824	16808	15462
60°	17814	15850	14460
65°	16745	14783	13460
70°	15558	13587	12176
75°	14152	12288	11023
80°	12658	10772	9990
85°	9732	8853	7294

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 20422 cd/sqm



TEST NUMBER: P824227

CATALOG NUMBER: CB2R-085D-835-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.0	4.0
10°-20°	379.0	11.2
20°-30°	544.9	16.2
30°-40°	612.5	18.2
40°-50°	591.6	17.5
50°-60°	499.9	14.8
60°-70°	359.1	10.7
70°-80°	196.2	5.8
80°-90°	52.1	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°	1059.8	31.4
0°-40°	1672.3	49.6
0°-60°	2763.8	82.0
0°-90°	3371.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3371.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1446	1446	1446	1446	1446	
5°	1428	1448	1430	1430	1440	136
15°	1355	1367	1346	1333	1335	382
25°	1218	1219	1183	1157	1150	561
35°	1035	1023	975	937	929	647
45°	829	812	763	723	712	641
55°	620	597	554	519	509	554
65°	406	391	359	333	327	403
75°	210	197	183	168	164	225
85°	49	46	44	39	36	60
90°	0	0	0	0	0	



TEST NUMBER: P824227

CATALOG NUMBER: CB2R-085D-835-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1445.7	1445.7	1445.7	1445.7	1445.7
2.5°	1436.0	1453.3	1440.4	1442.2	1444.8
5°	1428.0	1447.5	1430.2	1430.4	1440.2
7.5°	1417.8	1436.2	1414.5	1410.5	1419.6
10°	1403.6	1422.0	1400.3	1392.7	1399.2
12.5°	1385.0	1402.6	1381.7	1369.7	1375.3
15°	1354.9	1366.8	1346.1	1332.8	1335.0
17.5°	1322.2	1329.5	1299.6	1288.5	1286.3
20°	1297.4	1303.9	1268.6	1253.0	1250.9
22.5°	1265.5	1271.1	1234.0	1214.9	1211.9
25°	1217.7	1218.7	1183.3	1156.6	1150.1
27.5°	1167.6	1164.2	1124.9	1093.3	1084.8
30°	1131.3	1127.0	1081.5	1048.1	1040.5
32.5°	1092.3	1084.6	1039.0	1003.0	995.4
35°	1035.0	1023.1	975.2	937.4	928.7
37.5°	973.9	960.5	913.5	872.3	862.5
40°	933.2	918.0	870.1	828.9	819.2
42.5°	892.4	875.5	826.7	785.5	774.9
45°	829.1	811.8	762.7	722.6	711.8
47.5°	768.9	746.8	699.2	659.3	648.5
50°	727.3	703.5	657.5	618.5	607.7
52.5°	684.8	660.1	615.9	578.7	567.9
55°	619.9	597.2	553.5	518.9	509.2
57.5°	555.7	533.8	493.9	460.9	451.4
60°	511.4	493.0	455.0	423.8	415.1
62.5°	468.9	452.2	416.0	387.5	378.8
65°	406.3	391.1	358.7	333.0	326.6
67.5°	345.4	330.2	304.0	281.0	273.6
70°	305.5	290.4	266.8	245.6	239.1
72.5°	267.4	251.4	232.2	212.9	208.1
75°	210.3	197.3	182.6	168.2	163.8
77.5°	159.8	147.3	136.6	126.4	125.3
80°	126.2	115.4	107.4	100.7	99.6
82.5°	94.3	86.1	80.8	75.9	75.7
85°	48.7	45.5	44.3	38.7	36.5
87.5°	14.2	14.2	12.4	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P824227
 CATALOG NUMBER: CB2R-085D-835-1D-UNV-STD-W-4

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	22.06	23.64	22.42	23.95	24.27	20.96	22.54	21.32	22.85	23.17
	3H	23.75	25.18	24.13	25.50	25.86	22.54	23.96	22.91	24.29	24.65
	4H	24.41	25.75	24.81	26.10	26.48	23.14	24.48	23.54	24.83	25.20
	6H	24.85	26.09	25.26	26.45	26.84	23.55	24.78	23.96	25.15	25.54
	8H	25.02	26.20	25.44	26.59	26.99	23.71	24.89	24.13	25.28	25.68
	12H	25.11	26.24	25.54	26.63	27.06	23.79	24.92	24.22	25.30	25.73
4H	2H	22.55	23.89	22.95	24.23	24.61	21.67	23.01	22.07	23.36	23.74
	3H	24.48	25.60	24.89	25.99	26.39	23.47	24.59	23.88	24.98	25.39
	4H	25.25	26.26	25.68	26.67	27.11	24.17	25.18	24.60	25.59	26.03
	6H	25.81	26.69	26.26	27.13	27.59	24.68	25.56	25.14	26.00	26.46
	8H	26.03	26.85	26.49	27.29	27.76	24.89	25.71	25.35	26.15	26.62
	12H	26.17	26.91	26.65	27.38	27.85	25.01	25.75	25.49	26.22	26.69
8H	4H	25.46	26.28	25.92	26.73	27.19	24.50	25.32	24.96	25.76	26.23
	6H	26.13	26.81	26.63	27.30	27.78	25.13	25.81	25.62	26.30	26.78
	8H	26.43	27.04	26.94	27.55	28.03	25.41	26.02	25.92	26.53	27.02
	12H	26.63	27.17	27.14	27.67	28.23	25.59	26.13	26.10	26.62	27.19
12H	4H	25.47	26.21	25.96	26.69	27.16	24.53	25.27	25.02	25.75	26.22
	6H	26.16	26.78	26.68	27.28	27.77	25.20	25.81	25.71	26.32	26.80
	8H	26.51	27.06	27.02	27.55	28.11	25.54	26.08	26.04	26.57	27.13