

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: P572130

Luminaire Tested: 24ID-25-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572130
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-7)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-25-L840-DBR
Description: 2500 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

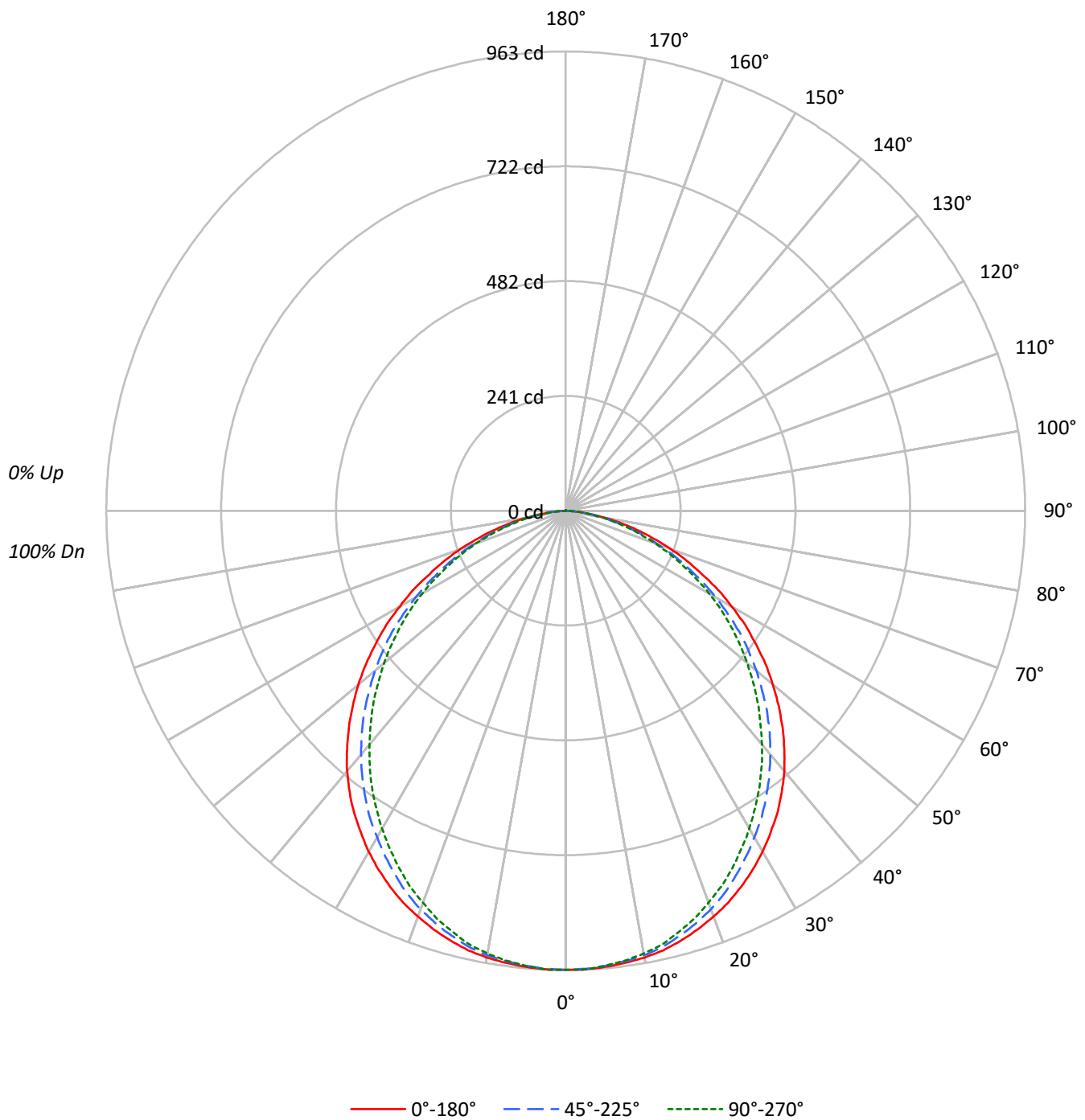
Lumens per Lamp: N/A
Luminaire Lumens: 2530.0 lumens
Efficiency: N/A
Efficacy: 118.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.4
Input Voltage (V):
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	105	101	97	107	103	99	95	98	95	92		94	92	90		91
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71
4	84	72	63	57	81	71	63	56	68	61	56		66	60	55		64
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44
9	57	44	36	31	56	44	36	31	42	35	30		41	35	30		40
10	54	41	33	28	53	40	33	28	39	32	28		38	32	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1295	1295	1295
5°	1297	1293	1293
10°	1300	1293	1288
15°	1300	1286	1274
20°	1297	1274	1253
25°	1292	1253	1227
30°	1283	1229	1196
35°	1271	1204	1163
40°	1252	1172	1124
45°	1223	1136	1084
50°	1187	1092	1040
55°	1139	1044	991
60°	1081	978	934
65°	1003	897	862
70°	919	807	783
75°	796	694	675
80°	642	545	545
85°	324	343	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1223 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	3.6
10°-20°	260.4	10.3
20°-30°	389.8	15.4
30°-40°	460.7	18.2
40°-50°	463.7	18.3
50°-60°	401.3	15.9
60°-70°	285.8	11.3
70°-80°	146.7	5.8
80°-90°	30.4	1.2
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°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	741.2	29.3
0°-40°	1201.9	47.5
0°-60°	2067.0	81.7
0°-90°	2529.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2530.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	960	959	958	956	958	91
15°	933	929	923	916	914	263
25°	870	863	844	830	827	401
35°	774	761	733	714	708	483
45°	643	629	597	576	570	495
55°	486	472	445	426	423	435
65°	315	304	282	272	271	314
75°	153	146	134	128	130	163
85°	21	21	22	22	21	32
90°	0	0	0	0	0	1
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	1	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	962.7	962.7	962.7	962.7	962.7
2.5°	962.7	961.4	961.4	960.2	962.7
5°	960.2	958.9	957.7	956.5	957.7
7.5°	956.5	954.0	952.8	950.3	951.5
10°	951.5	949.1	946.6	942.9	942.9
12.5°	944.1	941.6	936.7	931.8	931.8
15°	933.0	929.3	923.1	915.7	914.5
17.5°	920.6	915.7	907.0	898.4	897.2
20°	905.8	900.9	889.7	878.6	874.9
22.5°	889.7	883.6	868.7	856.4	852.7
25°	870.0	862.6	844.0	830.4	826.7
27.5°	849.0	839.1	818.1	803.2	798.3
30°	825.5	815.6	790.9	776.1	769.9
32.5°	799.5	788.4	763.7	745.2	739.0
35°	773.6	761.2	732.8	714.3	708.1
37.5°	743.9	730.3	700.7	680.9	674.7
40°	713.0	699.4	667.3	647.5	640.1
42.5°	678.4	664.8	632.7	611.7	604.3
45°	642.6	629.0	596.9	575.9	569.7
47.5°	605.5	589.5	558.6	538.8	532.6
50°	567.2	551.1	521.5	501.7	496.8
52.5°	527.7	511.6	483.2	463.4	459.7
55°	485.7	472.1	444.9	426.3	422.6
57.5°	446.1	431.3	402.9	389.3	385.6
60°	401.6	389.3	363.3	351.0	347.2
62.5°	360.8	348.5	322.5	308.9	307.7
65°	315.1	304.0	281.8	271.9	270.6
67.5°	275.6	263.2	244.7	234.8	234.8
70°	233.6	222.4	205.1	199.0	199.0
72.5°	191.5	184.1	169.3	163.1	164.4
75°	153.2	145.8	133.5	128.5	129.8
77.5°	117.4	108.7	101.3	97.6	98.9
80°	82.8	76.6	70.4	69.2	70.4
82.5°	49.4	45.7	44.5	44.5	44.5
85°	21.0	21.0	22.2	22.2	21.0
87.5°	8.7	7.4	7.4	8.7	8.7
90°	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	1.2	0.0	1.2	1.2	1.2
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	1.2	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	1.2
177.5°	0.0	0.0	1.2	1.2	1.2
180°	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	12.63	14.23	12.99	14.54	14.86	11.86	13.46	12.23	13.78	14.09
	3H	14.25	15.70	14.63	16.02	16.38	13.41	14.86	13.79	15.18	15.54
	4H	14.80	16.16	15.20	16.51	16.89	13.93	15.29	14.33	15.64	16.02
	6H	15.16	16.41	15.57	16.78	17.17	14.27	15.52	14.68	15.89	16.28
	8H	15.23	16.43	15.66	16.82	17.22	14.35	15.55	14.77	15.93	16.33
	12H	15.26	16.40	15.69	16.79	17.21	14.38	15.53	14.81	15.91	16.34
4H	2H	13.09	14.45	13.49	14.80	15.17	12.47	13.83	12.87	14.17	14.55
	3H	14.92	16.06	15.33	16.45	16.85	14.22	15.35	14.63	15.75	16.15
	4H	15.59	16.61	16.02	17.03	17.46	14.84	15.86	15.27	16.27	16.71
	6H	16.05	16.94	16.50	17.38	17.84	15.27	16.16	15.72	16.60	17.06
	8H	16.16	16.99	16.62	17.43	17.90	15.38	16.21	15.84	16.65	17.12
	12H	16.20	16.95	16.68	17.42	17.89	15.43	16.18	15.91	16.65	17.12
8H	4H	15.78	16.61	16.24	17.05	17.52	15.10	15.93	15.56	16.37	16.84
	6H	16.31	17.00	16.81	17.49	17.97	15.61	16.30	16.10	16.79	17.26
	8H	16.46	17.08	16.97	17.59	18.07	15.76	16.38	16.27	16.89	17.37
	12H	16.54	17.08	17.04	17.57	18.13	15.86	16.40	16.36	16.89	17.45
12H	4H	15.78	16.53	16.27	17.01	17.48	15.12	15.86	15.60	16.34	16.81
	6H	16.32	16.94	16.83	17.45	17.94	15.63	16.25	16.14	16.76	17.25
	8H	16.51	17.05	17.02	17.54	18.11	15.83	16.38	16.34	16.87	17.43