

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: P572118

Luminaire Tested: 24ID-20-L830-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572118
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-20-L830-DBR
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 3000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

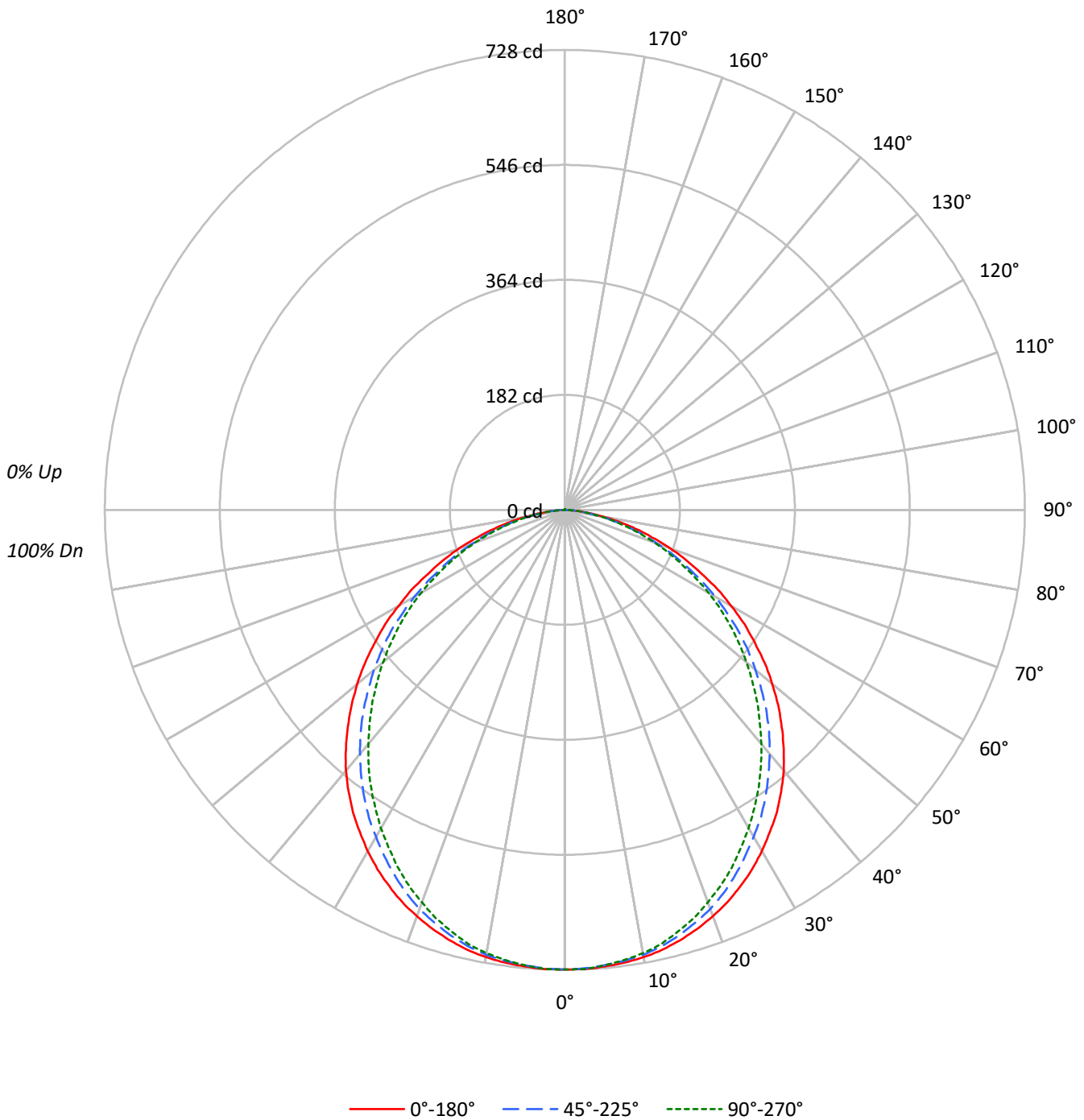
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1912.0 lumens
Efficiency: N/A
Efficacy: 113.1 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): 16.9
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	0
RW	70	50	30	10	70	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
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	979	979	979
5°	980	978	978
10°	982	977	974
15°	982	972	963
20°	980	963	947
25°	976	947	928
30°	969	929	904
35°	960	910	879
40°	947	886	850
45°	924	858	819
50°	897	825	786
55°	861	789	749
60°	817	739	706
65°	758	678	651
70°	694	610	592
75°	602	525	510
80°	485	412	412
85°	245	259	245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 924 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.8	3.6
10°-20°	196.8	10.3
20°-30°	294.6	15.4
30°-40°	348.2	18.2
40°-50°	350.5	18.3
50°-60°	303.3	15.9
60°-70°	216.0	11.3
70°-80°	110.9	5.8
80°-90°	22.9	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°	560.2	29.3
0°-40°	908.3	47.5
0°-60°	1562.1	81.7
0°-90°	1911.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1912.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	728	728	728	728	728	
5°	726	725	724	723	724	69
15°	705	702	698	692	691	199
25°	658	652	638	628	625	303
35°	585	575	554	540	535	365
45°	486	475	451	435	430	374
55°	367	357	336	322	319	328
65°	238	230	213	206	204	237
75°	116	110	101	97	98	124
85°	16	16	17	17	16	24
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°	727.5	727.5	727.5	727.5	727.5
2.5°	727.5	726.6	726.6	725.6	727.5
5°	725.6	724.7	723.8	722.8	723.8
7.5°	722.8	721.0	720.0	718.2	719.1
10°	719.1	717.2	715.4	712.6	712.6
12.5°	713.5	711.6	707.9	704.2	704.2
15°	705.1	702.3	697.6	692.0	691.1
17.5°	695.8	692.0	685.5	678.9	678.0
20°	684.5	680.8	672.4	664.0	661.2
22.5°	672.4	667.7	656.5	647.2	644.4
25°	657.5	651.9	637.9	627.6	624.8
27.5°	641.6	634.1	618.2	607.0	603.3
30°	623.8	616.4	597.7	586.5	581.8
32.5°	604.2	595.8	577.2	563.1	558.5
35°	584.6	575.3	553.8	539.8	535.1
37.5°	562.2	551.9	529.5	514.6	509.9
40°	538.9	528.6	504.3	489.4	483.8
42.5°	512.7	502.4	478.2	462.3	456.7
45°	485.6	475.4	451.1	435.2	430.5
47.5°	457.6	445.5	422.1	407.2	402.5
50°	428.7	416.5	394.1	379.2	375.4
52.5°	398.8	386.6	365.2	350.2	347.4
55°	367.0	356.7	336.2	322.2	319.4
57.5°	337.1	325.9	304.5	294.2	291.4
60°	303.5	294.2	274.6	265.2	262.4
62.5°	272.7	263.4	243.7	233.5	232.5
65°	238.1	229.7	212.9	205.5	204.5
67.5°	208.3	198.9	184.9	177.4	177.4
70°	176.5	168.1	155.0	150.4	150.4
72.5°	144.8	139.2	127.9	123.3	124.2
75°	115.8	110.2	100.9	97.1	98.1
77.5°	88.7	82.2	76.6	73.8	74.7
80°	62.6	57.9	53.2	52.3	53.2
82.5°	37.4	34.6	33.6	33.6	33.6
85°	15.9	15.9	16.8	16.8	15.9
87.5°	6.5	5.6	5.6	6.5	6.5
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°	0.9	0.0	0.9	0.9	0.9
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.9	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	0.9
177.5°	0.0	0.0	0.9	0.9	0.9
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	11.65	13.26	12.02	13.57	13.88	10.89	12.49	11.25	12.80	13.12
	3H	13.28	14.72	13.66	15.05	15.41	12.44	13.88	12.82	14.21	14.57
	4H	13.83	15.19	14.23	15.54	15.91	12.96	14.32	13.36	14.67	15.04
	6H	14.18	15.44	14.59	15.80	16.20	13.29	14.55	13.70	14.91	15.30
	8H	14.26	15.46	14.69	15.85	16.25	13.37	14.57	13.80	14.96	15.36
	12H	14.28	15.43	14.71	15.81	16.24	13.40	14.55	13.83	14.93	15.36
4H	2H	12.12	13.47	12.52	13.82	14.20	11.49	12.85	11.89	13.20	13.58
	3H	13.95	15.08	14.36	15.48	15.88	13.24	14.38	13.65	14.77	15.17
	4H	14.62	15.64	15.05	16.05	16.49	13.87	14.89	14.30	15.30	15.74
	6H	15.08	15.97	15.53	16.41	16.86	14.29	15.18	14.75	15.62	16.08
	8H	15.18	16.02	15.65	16.46	16.92	14.40	15.24	14.87	15.68	16.14
	12H	15.23	15.97	15.71	16.45	16.92	14.46	15.20	14.94	15.68	16.15
8H	4H	14.81	15.64	15.27	16.08	16.55	14.12	14.96	14.59	15.40	15.86
	6H	15.34	16.03	15.84	16.52	16.99	14.64	15.32	15.13	15.81	16.29
	8H	15.49	16.11	16.00	16.61	17.10	14.79	15.41	15.30	15.91	16.40
	12H	15.57	16.11	16.07	16.60	17.16	14.88	15.43	15.39	15.92	16.48
12H	4H	14.81	15.56	15.29	16.03	16.50	14.14	14.89	14.62	15.36	15.83
	6H	15.35	15.97	15.86	16.48	16.96	14.66	15.28	15.17	15.79	16.27
	8H	15.54	16.08	16.04	16.57	17.13	14.86	15.40	15.36	15.89	16.46