

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: P572122

Luminaire Tested: 24ID-20-L840-DBR

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572122
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-L840-DBR
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN REGRESSED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

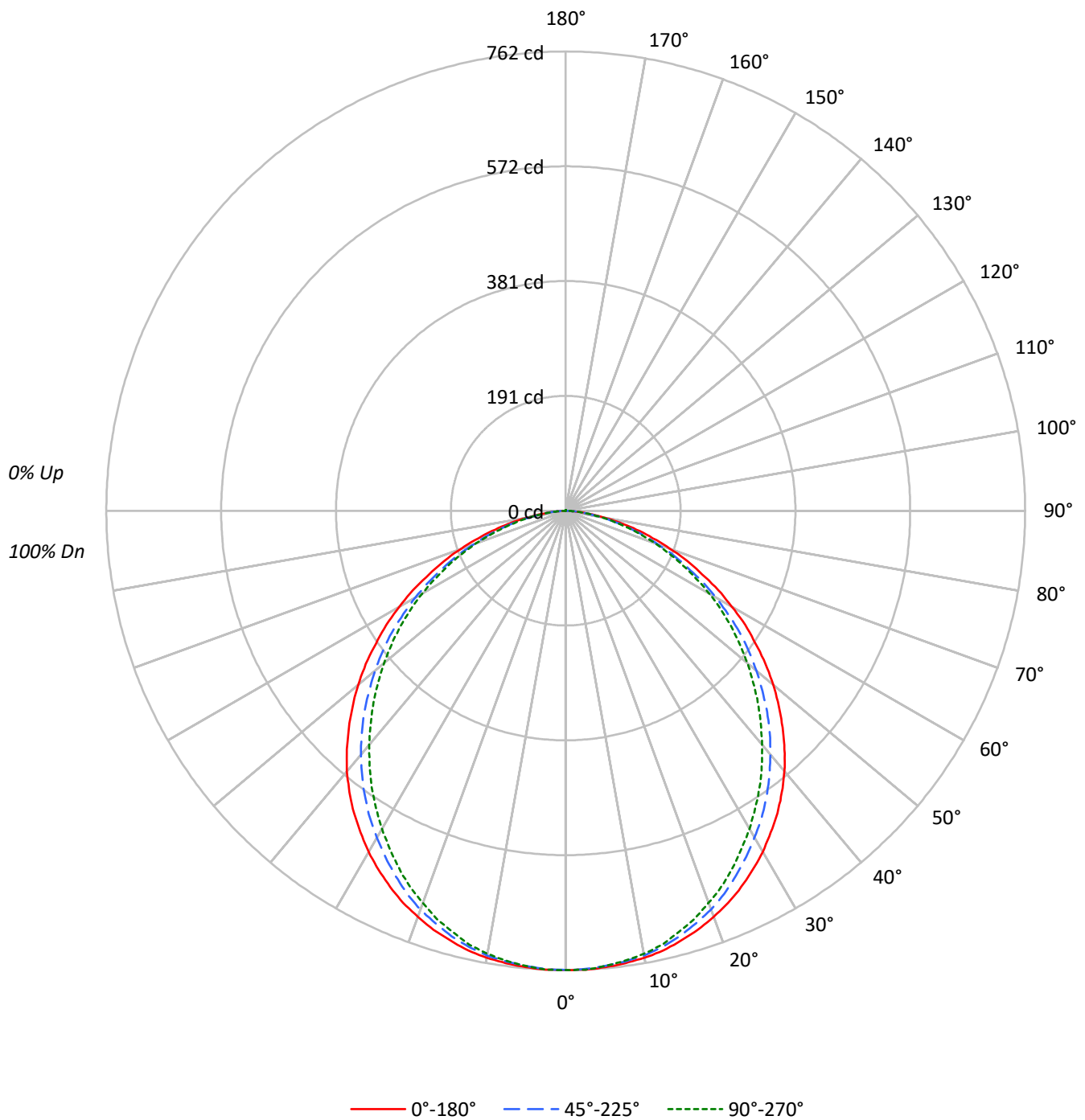
Lumens per Lamp: N/A
Luminaire Lumens: 2003.0 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.19 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	95	98	95	92	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	28	38	32	27	37	32	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1025	1025	1025
5°	1027	1024	1024
10°	1029	1024	1020
15°	1029	1018	1008
20°	1027	1009	992
25°	1023	992	972
30°	1015	973	947
35°	1006	953	921
40°	991	928	890
45°	968	899	858
50°	940	864	823
55°	902	826	785
60°	856	774	740
65°	794	710	682
70°	727	639	620
75°	631	549	534
80°	508	432	432
85°	256	272	256

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 968 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.1	3.6
10°-20°	206.1	10.3
20°-30°	308.6	15.4
30°-40°	364.8	18.2
40°-50°	367.1	18.3
50°-60°	317.7	15.9
60°-70°	226.3	11.3
70°-80°	116.2	5.8
80°-90°	24.0	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°	586.8	29.3
0°-40°	951.6	47.5
0°-60°	1636.4	81.7
0°-90°	2002.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	762	762	762	762	762	
5°	760	759	758	757	758	72
15°	739	736	731	725	724	209
25°	689	683	668	658	654	317
35°	612	603	580	566	561	383
45°	509	498	472	456	451	392
55°	384	374	352	338	335	344
65°	250	241	223	215	214	249
75°	121	115	106	102	103	129
85°	17	17	18	18	17	25
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°	762.1	762.1	762.1	762.1	762.1
2.5°	762.1	761.2	761.2	760.2	762.1
5°	760.2	759.2	758.2	757.2	758.2
7.5°	757.2	755.3	754.3	752.3	753.3
10°	753.3	751.4	749.4	746.5	746.5
12.5°	747.5	745.5	741.6	737.7	737.7
15°	738.7	735.7	730.8	725.0	724.0
17.5°	728.9	725.0	718.1	711.3	710.3
20°	717.1	713.2	704.4	695.6	692.7
22.5°	704.4	699.5	687.8	678.0	675.1
25°	688.8	682.9	668.2	657.5	654.5
27.5°	672.1	664.3	647.7	635.9	632.0
30°	653.5	645.7	626.1	614.4	609.5
32.5°	633.0	624.2	604.6	589.9	585.1
35°	612.4	602.7	580.2	565.5	560.6
37.5°	589.0	578.2	554.7	539.1	534.2
40°	564.5	553.7	528.3	512.7	506.8
42.5°	537.1	526.4	500.9	484.3	478.4
45°	508.7	498.0	472.5	455.9	451.0
47.5°	479.4	466.7	442.2	426.6	421.7
50°	449.1	436.3	412.9	397.2	393.3
52.5°	417.8	405.0	382.5	366.9	363.9
55°	384.5	373.7	352.2	337.5	334.6
57.5°	353.2	341.4	318.9	308.2	305.2
60°	318.0	308.2	287.6	277.9	274.9
62.5°	285.7	275.9	255.3	244.6	243.6
65°	249.5	240.7	223.1	215.2	214.3
67.5°	218.2	208.4	193.7	185.9	185.9
70°	184.9	176.1	162.4	157.5	157.5
72.5°	151.6	145.8	134.0	129.1	130.1
75°	121.3	115.4	105.7	101.7	102.7
77.5°	92.9	86.1	80.2	77.3	78.3
80°	65.5	60.7	55.8	54.8	55.8
82.5°	39.1	36.2	35.2	35.2	35.2
85°	16.6	16.6	17.6	17.6	16.6
87.5°	6.8	5.9	5.9	6.8	6.8
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°	1.0	0.0	1.0	1.0	1.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	1.0	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	1.0
177.5°	0.0	0.0	1.0	1.0	1.0
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	11.82	13.42	12.18	13.73	14.05	11.05	12.65	11.41	12.97	13.28
	3H	13.44	14.88	13.82	15.21	15.57	12.60	14.05	12.98	14.37	14.73
	4H	13.99	15.35	14.39	15.70	16.07	13.12	14.48	13.52	14.83	15.20
	6H	14.34	15.60	14.76	15.96	16.36	13.45	14.71	13.87	15.08	15.47
	8H	14.42	15.62	14.85	16.01	16.41	13.53	14.73	13.96	15.12	15.52
	12H	14.44	15.59	14.87	15.97	16.40	13.57	14.71	14.00	15.09	15.52
4H	2H	12.28	13.64	12.68	13.98	14.36	11.66	13.01	12.06	13.36	13.74
	3H	14.11	15.24	14.52	15.64	16.04	13.41	14.54	13.82	14.94	15.34
	4H	14.78	15.80	15.21	16.21	16.65	14.03	15.05	14.46	15.46	15.90
	6H	15.24	16.13	15.69	16.57	17.03	14.46	15.35	14.91	15.79	16.24
	8H	15.34	16.18	15.81	16.62	17.08	14.57	15.40	15.03	15.84	16.31
	12H	15.39	16.13	15.87	16.61	17.08	14.62	15.37	15.10	15.84	16.31
8H	4H	14.97	15.80	15.43	16.24	16.71	14.29	15.12	14.75	15.56	16.03
	6H	15.50	16.19	16.00	16.68	17.16	14.80	15.48	15.29	15.97	16.45
	8H	15.65	16.27	16.16	16.77	17.26	14.95	15.57	15.46	16.08	16.56
	12H	15.73	16.27	16.23	16.76	17.32	15.04	15.59	15.55	16.08	16.64
12H	4H	14.97	15.72	15.45	16.19	16.66	14.30	15.05	14.78	15.53	16.00
	6H	15.51	16.13	16.02	16.64	17.12	14.82	15.44	15.33	15.95	16.43
	8H	15.70	16.24	16.21	16.73	17.30	15.02	15.56	15.53	16.05	16.62

END OF REPORT