

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: P571950

Luminaire Tested: 22ID-40-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P571950
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-4)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 22ID-40-L840-DBD
Description: 4000 LUMEN, 2X2 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4134.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 1.22 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 2' x H: 0.17')
CIE Type: Direct

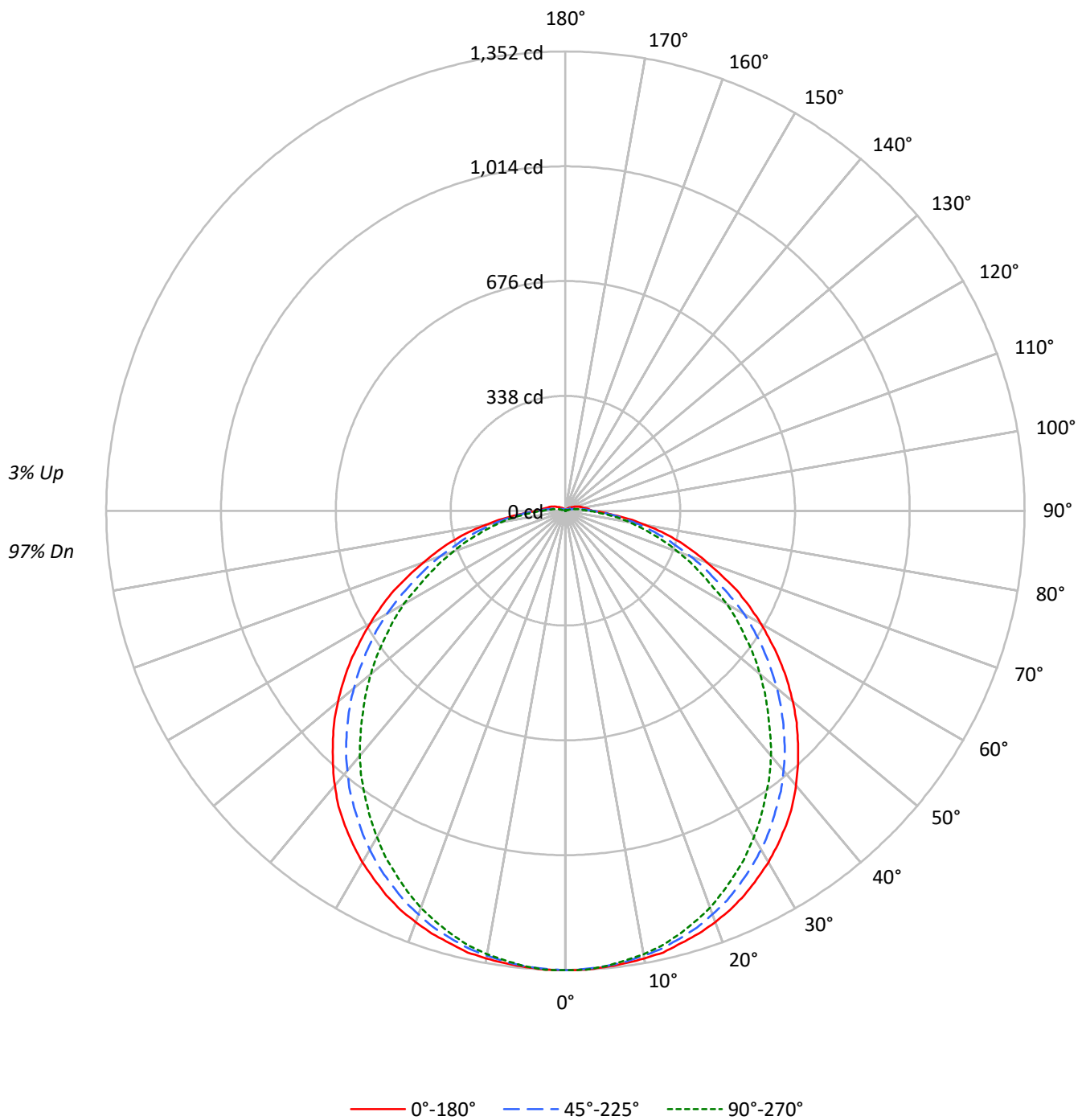
Input Watts (W): 32.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	100	100	100
1	107	102	98	93	104	100	95	92	95	91	88	90	88	85	86	84	82
2	97	89	81	75	94	87	80	74	82	77	72	79	74	70	75	72	68
3	89	78	69	62	86	76	68	62	72	66	60	69	64	59	66	62	58
4	81	69	60	53	78	67	59	52	64	57	51	62	55	50	59	54	49
5	74	61	52	45	72	60	51	45	58	50	44	55	49	43	53	47	43
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	48	42	38
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	33
8	59	46	37	31	57	45	37	31	43	36	30	42	35	30	40	34	30
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27
10	52	39	31	25	50	38	30	25	37	30	25	36	29	25	35	29	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3640	3640	3640
5°	3616	3600	3610
10°	3604	3560	3571
15°	3591	3520	3519
20°	3583	3472	3458
25°	3568	3415	3375
30°	3543	3352	3289
35°	3513	3273	3190
40°	3468	3193	3092
45°	3402	3095	2964
50°	3330	2985	2847
55°	3238	2855	2707
60°	3123	2712	2585
65°	3013	2503	2395
70°	2838	2332	2250
75°	2722	2139	2090
80°	2515	1954	1978
85°	2261	1773	1874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3402 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.1	3.1
10°-20°	368.3	8.9
20°-30°	559.6	13.5
30°-40°	675.6	16.3
40°-50°	700.7	16.9
50°-60°	635.2	15.4
60°-70°	492.9	11.9
70°-80°	317.4	7.7
80°-90°	149.9	3.6
90°-100°	58.2	1.4
100°-110°	25.7	0.6
110°-120°	12.6	0.3
120°-130°	6.3	0.2
130°-140°	2.7	0.1
140°-150°	0.7	0.0
150°-160°	0.0	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1055.9	25.5
0°-40°	1731.5	41.9
0°-60°	3067.4	74.2
0°-90°	4027.6	97.4
90°-120°	96.4	2.3
90°-150°	106.2	2.6
90°-180°	106.0	2.6
0°-180°	4134.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1352	1352	1352	1352	1352	
5°	1348	1348	1346	1344	1346	128
15°	1318	1314	1303	1295	1291	373
25°	1248	1238	1214	1191	1181	575
35°	1132	1116	1079	1044	1028	708
45°	968	952	909	864	844	747
55°	772	754	711	666	646	689
65°	558	533	492	460	443	550
75°	343	321	296	276	264	361
85°	143	143	135	127	118	137
90°	80	84	80	72	65	46
95°	65	55	51	47	43	51
105°	45	35	18	12	10	47
115°	27	22	12	2	0	27
125°	16	12	6	0	0	15
135°	8	6	2	0	0	7
145°	4	2	0	0	0	2
155°	0	0	0	0	0	0
165°	0	0	0	2	2	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1352.5	1352.5	1352.5	1352.5	1352.5
2.5°	1352.5	1350.4	1350.4	1350.4	1352.5
5°	1348.4	1348.4	1346.3	1344.3	1346.3
7.5°	1344.3	1342.2	1340.2	1338.2	1336.1
10°	1338.2	1336.1	1330.0	1325.9	1325.9
12.5°	1332.0	1325.9	1319.8	1313.6	1311.6
15°	1317.7	1313.6	1303.4	1295.3	1291.2
17.5°	1305.5	1299.3	1287.1	1274.8	1268.7
20°	1289.1	1281.0	1264.6	1250.3	1244.2
22.5°	1270.7	1260.5	1242.1	1221.7	1213.5
25°	1248.3	1238.1	1213.5	1191.1	1180.9
27.5°	1221.7	1211.5	1184.9	1156.3	1148.2
30°	1195.2	1182.9	1152.2	1121.6	1109.3
32.5°	1164.5	1150.2	1117.5	1082.8	1070.5
35°	1131.8	1115.5	1078.7	1044.0	1027.6
37.5°	1097.1	1080.7	1041.9	1003.1	986.8
40°	1056.2	1039.9	999.0	956.1	941.8
42.5°	1013.3	997.0	956.1	911.2	892.8
45°	968.4	952.0	909.1	864.2	843.8
47.5°	923.4	907.1	862.1	817.2	796.8
50°	874.4	858.1	813.1	766.1	747.7
52.5°	823.3	807.0	762.0	717.1	698.7
55°	772.3	753.9	711.0	666.0	645.6
57.5°	717.1	700.7	659.9	617.0	598.6
60°	664.0	645.6	606.8	565.9	549.6
62.5°	610.9	590.4	549.6	508.7	492.4
65°	557.7	533.2	492.4	459.7	443.3
67.5°	498.5	476.0	443.3	410.6	398.4
70°	443.3	424.9	392.3	365.7	351.4
72.5°	394.3	371.8	341.2	320.8	308.5
75°	343.2	320.8	296.2	275.8	263.5
77.5°	290.1	271.7	251.3	237.0	224.7
80°	239.0	224.7	210.4	196.1	188.0
82.5°	188.0	179.8	171.6	161.4	153.2
85°	143.0	143.0	134.8	126.7	118.5
87.5°	106.2	108.3	104.2	96.0	89.9
90°	79.7	83.8	79.7	71.5	65.4
92.5°	71.5	67.4	63.3	59.2	53.1
95°	65.4	55.2	51.1	47.0	42.9
97.5°	59.2	47.0	40.9	36.8	32.7
100°	53.1	40.9	30.6	26.6	24.5
102.5°	49.0	38.8	24.5	18.4	18.4
105°	44.9	34.7	18.4	12.3	10.2
107.5°	38.8	30.6	16.3	8.2	6.1
110°	34.7	28.6	14.3	4.1	2.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	30.6	24.5	14.3	4.1	0.0
115°	26.6	22.5	12.3	2.0	0.0
117.5°	24.5	18.4	10.2	2.0	0.0
120°	20.4	16.3	8.2	2.0	0.0
122.5°	18.4	14.3	8.2	2.0	0.0
125°	16.3	12.3	6.1	0.0	0.0
127.5°	14.3	10.2	6.1	0.0	0.0
130°	12.3	10.2	4.1	0.0	0.0
132.5°	10.2	8.2	4.1	0.0	0.0
135°	8.2	6.1	2.0	0.0	0.0
137.5°	6.1	6.1	2.0	0.0	0.0
140°	6.1	4.1	2.0	0.0	0.0
142.5°	4.1	4.1	0.0	0.0	0.0
145°	4.1	2.0	0.0	0.0	0.0
147.5°	2.0	2.0	0.0	0.0	0.0
150°	2.0	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°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	2.0	2.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	2.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	2.0	2.0	2.0
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	15.99	17.60	16.40	17.97	18.34	15.04	16.64	15.44	17.01	17.39
	3H	17.88	19.34	18.30	19.72	20.14	16.77	18.23	17.19	18.61	19.04
	4H	18.66	20.04	19.10	20.44	20.88	17.47	18.85	17.91	19.25	19.69
	6H	19.31	20.59	19.76	21.01	21.46	18.06	19.34	18.51	19.76	20.21
	8H	19.56	20.78	20.02	21.22	21.68	18.30	19.52	18.76	19.96	20.42
	12H	19.76	20.94	20.23	21.37	21.86	18.50	19.68	18.97	20.11	20.60
4H	2H	16.49	17.86	16.93	18.26	18.70	15.73	17.10	16.17	17.51	17.94
	3H	18.61	19.77	19.06	20.22	20.68	17.69	18.85	18.14	19.30	19.76
	4H	19.53	20.59	20.00	21.05	21.55	18.51	19.57	18.98	20.03	20.53
	6H	20.33	21.26	20.82	21.75	22.26	19.24	20.17	19.74	20.66	21.17
	8H	20.65	21.52	21.15	22.01	22.53	19.54	20.42	20.04	20.91	21.43
	12H	20.93	21.72	21.44	22.24	22.76	19.81	20.60	20.33	21.12	21.65
8H	4H	19.80	20.67	20.30	21.16	21.69	18.91	19.78	19.41	20.27	20.79
	6H	20.74	21.48	21.27	22.01	22.54	19.78	20.52	20.31	21.05	21.58
	8H	21.15	21.82	21.70	22.36	22.91	20.18	20.84	20.73	21.39	21.93
	12H	21.55	22.13	22.09	22.67	23.28	20.56	21.15	21.10	21.68	22.30
12H	4H	19.83	20.62	20.35	21.14	21.67	18.97	19.76	19.49	20.28	20.81
	6H	20.80	21.47	21.35	22.01	22.56	19.89	20.55	20.43	21.10	21.64
	8H	21.28	21.87	21.83	22.40	23.02	20.36	20.95	20.90	21.48	22.09