

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: P572121

Luminaire Tested: 24ID-20-L840-DBD

Issue Date: 10/5/2021

Test Information

Test Method: LM-79-2019
Report Number: P572121
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2109-397-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2021
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: 24ID-20-L840-DBD
Description: 2000 LUMEN, 2X4 INDEPTH TROFFER WITH 2IN DROPPED DOUBLE BARRELL LENS AND 4000K, 80 CRI LEDS
Light Source: -
Ballast/Driver: -

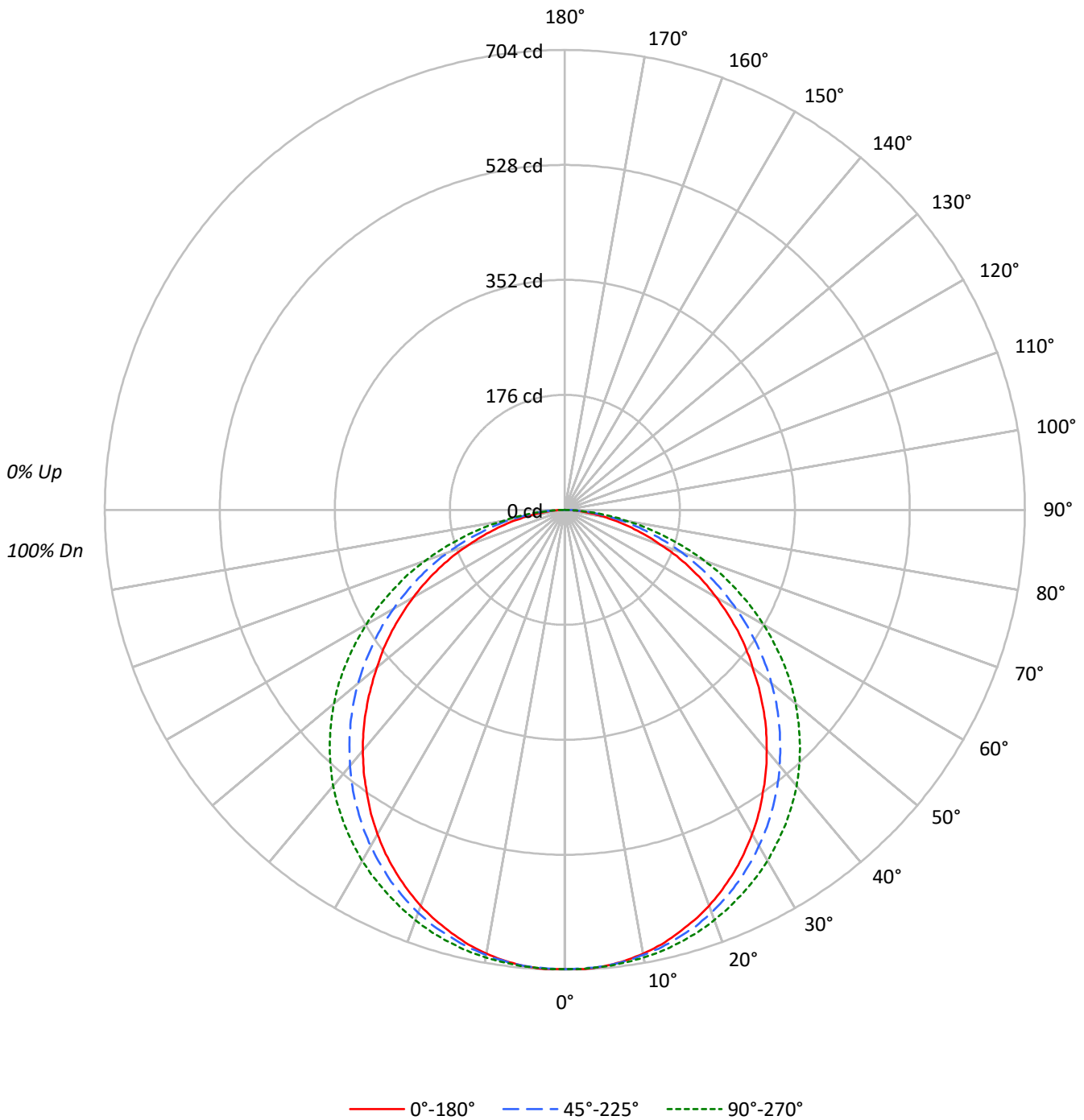
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2006.0 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.17')
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

TEST NUMBER: P572121
CATALOG NUMBER: 24ID-20-L840-DBD

Luminous Intensity Polar Plot





TEST NUMBER: P572121

CATALOG NUMBER: 24ID-20-L840-DBD

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	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	59	52	46	58	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	946	946	946
5°	944	940	941
10°	936	931	937
15°	924	921	933
20°	910	910	929
25°	892	896	924
30°	870	878	919
35°	843	859	913
40°	816	836	906
45°	784	811	894
50°	748	782	878
55°	715	746	856
60°	671	706	825
65°	621	660	784
70°	550	601	724
75°	476	518	636
80°	376	421	498
85°	259	260	299

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 894 cd/sqm



TEST NUMBER: P572121

CATALOG NUMBER: 24ID-20-L840-DBD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.3
10°-20°	191.3	9.5
20°-30°	289.9	14.5
30°-40°	348.7	17.4
40°-50°	360.0	17.9
50°-60°	323.5	16.1
60°-70°	246.3	12.3
70°-80°	141.4	7.0
80°-90°	38.1	1.9
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°	547.8	27.3
0°-40°	896.6	44.7
0°-60°	1580.1	78.8
0°-90°	2006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	701	702	701	700	702	67
15°	670	674	677	682	685	189
25°	612	618	628	641	646	282
35°	528	538	555	579	588	331
45°	429	439	464	496	509	331
55°	323	331	358	393	408	288
65°	213	222	247	275	290	210
75°	106	115	132	151	160	112
85°	25	29	34	36	38	29
90°	0	0	0	0	0	



TEST NUMBER: P572121

CATALOG NUMBER: 24ID-20-L840-DBD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.1	703.1	703.1	703.1	703.1
2.5°	703.8	703.8	702.5	701.8	703.1
5°	701.2	701.8	701.2	700.5	701.8
7.5°	696.6	697.3	697.3	697.9	699.2
10°	690.1	691.4	692.0	694.0	696.0
12.5°	681.6	682.9	685.5	688.8	691.4
15°	670.5	673.8	677.0	681.6	684.9
17.5°	658.8	662.7	667.9	673.8	677.7
20°	645.1	649.6	656.2	664.0	668.6
22.5°	629.4	635.3	643.1	652.9	658.1
25°	612.5	618.3	628.1	641.2	646.4
27.5°	593.6	600.1	611.8	626.8	634.0
30°	573.3	580.5	594.2	612.5	620.3
32.5°	551.8	559.6	575.3	596.2	604.6
35°	528.3	537.5	555.1	579.2	588.3
37.5°	505.5	514.6	534.2	560.3	570.7
40°	480.7	490.5	511.4	540.1	551.8
42.5°	455.9	464.4	487.9	518.5	530.9
45°	429.2	439.0	463.8	495.7	508.8
47.5°	402.4	412.9	439.0	471.6	485.3
50°	375.0	386.1	412.9	446.1	461.1
52.5°	349.6	358.7	386.1	420.1	435.7
55°	322.9	331.3	358.1	392.7	408.3
57.5°	294.8	304.6	331.3	364.0	379.6
60°	267.4	277.2	302.6	335.3	350.9
62.5°	240.7	249.8	274.6	305.9	321.6
65°	212.6	222.4	246.6	275.3	290.3
67.5°	185.2	195.7	218.5	244.6	260.3
70°	155.9	167.6	189.8	213.9	226.3
72.5°	129.8	140.9	161.1	182.6	194.4
75°	105.7	115.4	132.4	151.3	160.5
77.5°	81.5	92.0	107.0	121.3	128.5
80°	60.0	69.8	81.5	91.3	94.6
82.5°	41.1	48.3	56.7	62.0	66.5
85°	24.8	28.7	33.9	35.9	37.8
87.5°	10.4	11.7	13.7	13.0	13.7
90°	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: P572121
 CATALOG NUMBER: 24ID-20-L840-DBD

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	10.41	12.06	10.78	12.37	12.68	11.88	13.52	12.25	13.84	14.15
	3H	11.98	13.47	12.36	13.79	14.15	13.78	15.27	14.16	15.59	15.95
	4H	12.50	13.90	12.90	14.25	14.62	14.48	15.88	14.88	16.23	16.60
	6H	12.83	14.13	13.24	14.49	14.88	14.98	16.27	15.39	16.64	17.03
	8H	12.91	14.15	13.33	14.54	14.94	15.12	16.36	15.54	16.75	17.15
	12H	12.95	14.14	13.38	14.52	14.95	15.20	16.39	15.63	16.77	17.20
4H	2H	11.17	12.57	11.56	12.91	13.29	12.34	13.74	12.73	14.08	14.46
	3H	12.93	14.11	13.34	14.51	14.90	14.45	15.63	14.86	16.02	16.42
	4H	13.56	14.62	13.99	15.03	15.47	15.28	16.35	15.71	16.76	17.20
	6H	13.99	14.92	14.44	15.36	15.82	15.91	16.84	16.36	17.28	17.73
	8H	14.11	14.98	14.56	15.42	15.88	16.10	16.97	16.55	17.41	17.87
	12H	14.17	14.96	14.65	15.43	15.90	16.21	16.99	16.69	17.47	17.94
8H	4H	13.94	14.81	14.40	15.25	15.72	15.48	16.35	15.94	16.79	17.26
	6H	14.48	15.20	14.97	15.69	16.16	16.20	16.93	16.70	17.41	17.89
	8H	14.65	15.29	15.15	15.80	16.29	16.45	17.10	16.96	17.60	18.09
	12H	14.76	15.33	15.26	15.82	16.38	16.62	17.20	17.13	17.69	18.25
12H	4H	13.99	14.77	14.47	15.25	15.72	15.49	16.27	15.97	16.74	17.21
	6H	14.55	15.20	15.06	15.71	16.19	16.22	16.87	16.73	17.38	17.86
	8H	14.77	15.34	15.27	15.83	16.39	16.51	17.09	17.02	17.58	18.14