

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: NEO-RAY

Report Number: P1012070

Luminaire Tested: S123DIP-B775D585UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1012070
REPORT IS A COMBINATION OF REPORTS P990457 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIP-B775D585UB50-4F0-XX-W2A-F1
Description: Define 3 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

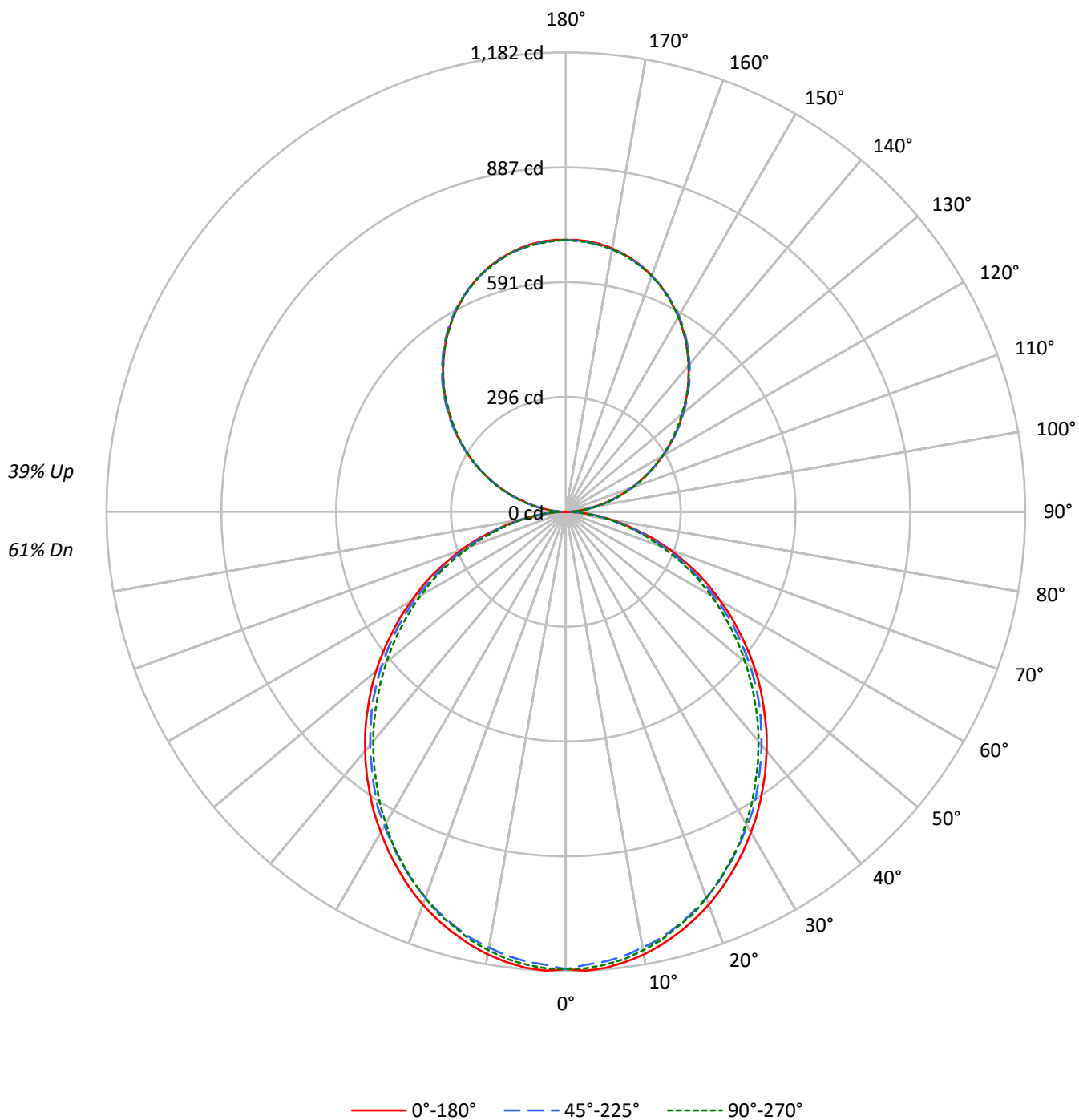
Lumens per Lamp: N/A
Luminaire Lumens: 5003.0 lumens
Efficiency: N/A
Efficacy: 97.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 51.3
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	110	110	110	110		103	103	103	103		90	90	90		78	78	78		66	66	66
1	100	96	92	88		94	90	86	83		79	76	74		68	66	65		59	57	56
2	91	84	77	72		85	78	73	68		69	65	61		60	57	54		52	49	47
3	83	74	66	60		78	69	62	57		61	55	51		53	49	46		46	43	40
4	76	65	57	51		71	61	54	48		54	48	44		47	43	39		41	37	35
5	70	58	50	44		65	55	47	42		48	42	38		42	38	34		37	33	30
6	65	52	44	38		60	49	42	36		44	37	33		38	33	30		33	30	26
7	60	47	39	33		56	45	37	32		40	33	29		35	30	26		30	27	24
8	55	43	35	29		52	41	33	28		36	30	26		32	27	23		28	24	21
9	52	39	32	26		48	37	30	25		33	27	23		29	25	21		26	22	19
10	48	36	29	24		45	34	27	23		31	25	21		27	22	19		24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12668	12668	12668
5°	12699	12231	12212
10°	12587	11818	11695
15°	12412	11387	11133
20°	12211	10909	10574
25°	11951	10404	9978
30°	11668	9882	9350
35°	11370	9349	8726
40°	11058	8790	8112
45°	10715	8244	7471
50°	10367	7636	6828
55°	9920	7003	6176
60°	9459	6305	5482
65°	9026	5548	4759
70°	8405	4710	3915
75°	7505	3730	3040
80°	6482	2622	2149
85°	5052	1409	1077

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10715 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.0	2.2
10°-20°	313.3	6.3
20°-30°	462.7	9.2
30°-40°	540.4	10.8
40°-50°	543.3	10.9
50°-60°	477.2	9.5
60°-70°	355.4	7.1
70°-80°	202.3	4.0
80°-90°	59.0	1.2
90°-100°	45.0	0.9
100°-110°	136.3	2.7
110°-120°	232.1	4.6
120°-130°	305.3	6.1
130°-140°	343.2	6.9
140°-150°	337.4	6.7
150°-160°	284.0	5.7
160°-170°	189.1	3.8
170°-180°	66.2	1.3
0°-30°	886.9	17.7
0°-40°	1427.3	28.5
0°-60°	2447.8	48.9
0°-90°	3064.5	61.3
90°-120°	413.4	8.3
90°-150°	1399.2	28.0
90°-180°	1939.0	38.8
0°-180°	5003.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1178	1173	1162	1172	1170	112
15°	1121	1117	1104	1112	1106	316
25°	1018	1012	999	1000	997	469
35°	880	874	861	855	850	551
45°	722	718	704	692	687	557
55°	548	546	533	522	517	490
65°	373	368	358	350	347	368
75°	197	193	190	185	182	211
85°	53	51	51	49	49	56
90°	0	6	13	15	16	6
95°	32	36	41	43	43	36
105°	124	125	130	130	131	132
115°	234	235	234	235	234	231
125°	342	344	342	340	338	305
135°	444	447	446	444	443	342
145°	538	539	541	540	538	336
155°	616	616	617	619	615	284
165°	671	669	669	673	669	189
175°	698	696	696	699	695	66
180°	700	700	700	700	700	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1182.0	1177.9	1166.8	1176.9	1175.9
5°	1177.9	1172.9	1161.7	1171.9	1169.8
7.5°	1168.8	1163.8	1152.6	1161.7	1160.7
10°	1156.7	1151.6	1138.5	1147.6	1145.5
12.5°	1140.5	1136.4	1124.3	1130.4	1129.4
15°	1121.3	1117.2	1104.1	1112.2	1106.1
17.5°	1100.0	1095.0	1081.8	1087.9	1085.8
20°	1075.7	1069.7	1056.5	1060.5	1057.5
22.5°	1048.4	1042.3	1029.2	1032.2	1028.2
25°	1018.0	1012.0	998.8	999.8	996.8
27.5°	986.7	980.6	966.4	967.4	964.4
30°	952.3	947.2	933.0	933.0	926.0
32.5°	917.9	910.8	900.7	893.6	890.5
35°	880.4	874.3	861.2	855.1	850.1
37.5°	843.0	834.9	821.7	814.6	811.6
40°	803.5	797.4	783.3	775.2	771.1
42.5°	764.0	757.0	742.8	734.7	730.6
45°	721.5	717.5	704.3	692.2	687.1
47.5°	680.0	674.0	661.8	649.7	645.6
50°	637.5	632.5	619.3	608.2	602.1
52.5°	593.0	590.0	575.8	566.7	560.6
55°	547.5	546.5	533.3	522.2	517.1
57.5°	505.0	500.9	490.8	480.7	474.6
60°	458.4	457.4	445.3	436.2	431.1
62.5°	416.9	413.9	401.8	392.6	389.6
65°	373.4	368.4	358.2	350.1	347.1
67.5°	326.9	322.8	314.7	307.6	303.6
70°	285.4	279.3	273.2	266.1	261.1
72.5°	241.9	237.8	230.7	224.7	222.6
75°	197.3	193.3	190.3	185.2	182.2
77.5°	157.9	155.8	151.8	147.7	147.7
80°	119.4	116.4	114.4	113.3	113.3
82.5°	82.0	82.0	82.0	79.9	78.9
85°	52.6	50.6	50.6	48.6	48.6
87.5°	26.3	23.3	22.3	21.3	21.3
90°	0.5	6.0	13.2	15.4	16.5
92.5°	16.5	19.8	23.1	24.7	23.6
95°	32.4	36.3	40.7	42.9	42.9
97.5°	53.3	56.1	59.4	62.1	61.6
100°	74.7	78.0	80.8	82.4	83.5
102.5°	99.5	101.1	105.0	106.6	106.1
105°	123.7	124.8	129.7	129.7	130.8
107.5°	152.2	152.8	155.0	156.6	156.1
110°	178.6	179.7	180.8	183.0	181.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	206.1	206.6	206.6	209.4	209.4
115°	233.6	235.2	234.1	234.7	234.1
117.5°	261.6	262.2	261.1	261.1	259.4
120°	287.4	290.7	288.0	287.4	286.3
122.5°	314.4	316.6	315.5	313.8	312.2
125°	341.8	343.5	342.4	340.2	338.0
127.5°	367.1	370.4	369.3	366.0	363.8
130°	392.4	396.8	395.2	393.0	389.1
132.5°	417.7	422.1	421.0	418.2	415.5
135°	443.5	446.8	446.3	444.1	443.0
137.5°	467.1	469.9	471.5	468.8	467.1
140°	491.9	494.6	495.2	494.6	490.8
142.5°	514.4	517.2	518.3	517.7	515.0
145°	538.0	539.1	540.8	540.2	538.0
147.5°	558.4	560.6	562.2	562.2	558.9
150°	579.8	580.9	582.0	582.0	578.7
152.5°	597.4	599.0	599.6	600.7	597.9
155°	616.1	616.1	616.6	618.8	615.0
157.5°	632.0	631.5	632.0	634.2	630.9
160°	646.9	645.8	645.8	648.5	646.3
162.5°	660.1	658.4	659.0	661.7	657.9
165°	671.0	669.4	669.4	672.7	668.8
167.5°	680.4	678.2	678.7	682.0	678.7
170°	688.1	685.9	685.9	689.7	685.9
172.5°	694.1	691.9	691.9	695.2	691.4
175°	698.0	695.8	695.8	699.1	695.2
177.5°	700.2	698.0	698.0	701.3	697.4
180°	699.6	699.6	699.6	699.6	699.6

(END OF REPORT)