

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: P1031406

Luminaire Tested: S123DIW-B1000D755UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031406
REPORT IS A COMBINATION OF REPORTS P990846 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D755UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

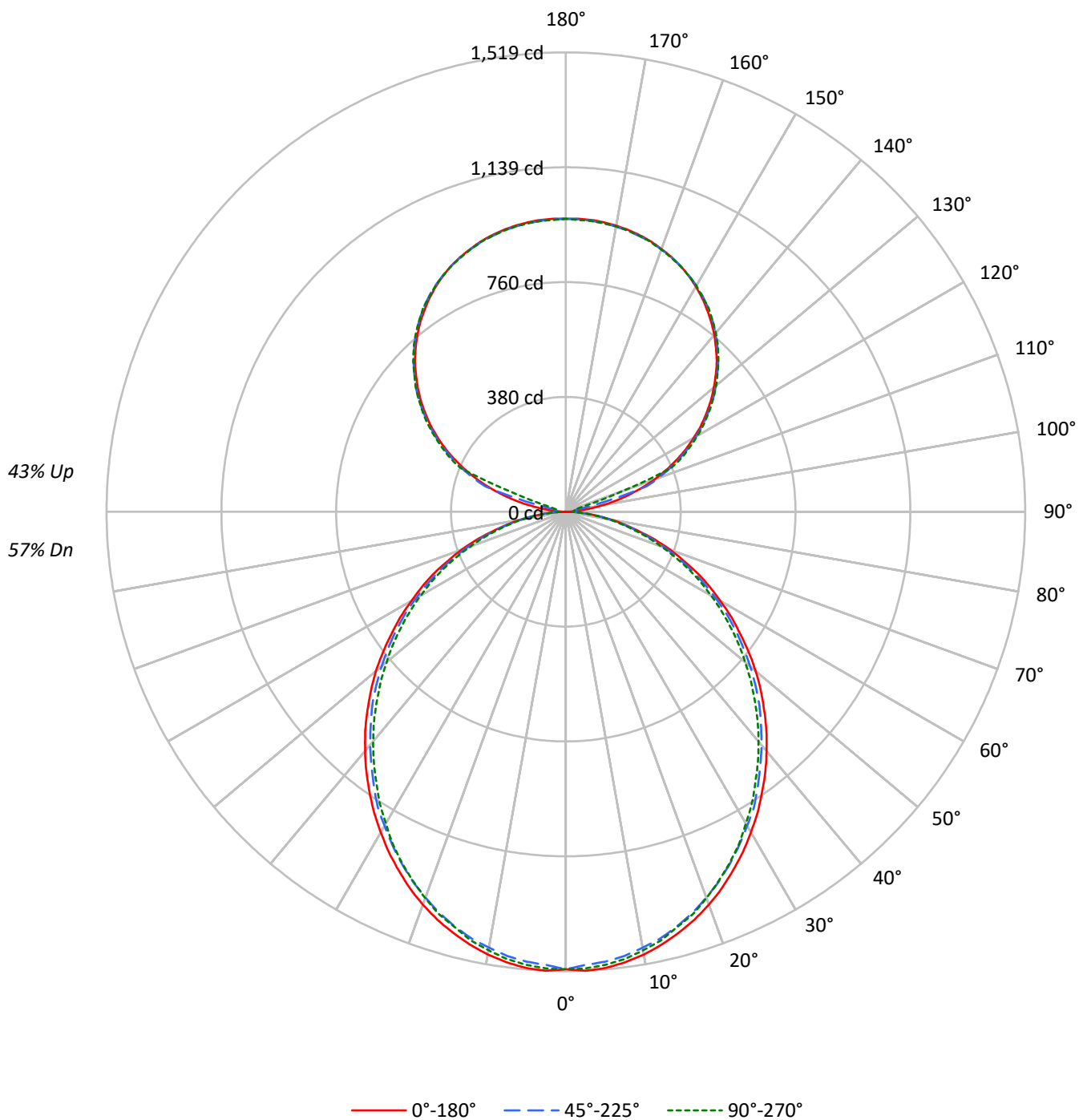
Lumens per Lamp: N/A
Luminaire Lumens: 6892.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 70
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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	63	63	63
1	99	95	91	87	92	89	85	82	77	74	72	65	64	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	49	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	53	47	42	45	41	37	38	35	33
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	39	33	55	44	36	31	38	33	28	33	29	25	29	25	22
8	55	42	34	29	51	40	33	28	35	29	25	31	26	22	26	23	20
9	51	39	31	26	48	36	30	25	32	26	22	28	24	20	24	21	18
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16283	16283	16283
5°	16323	15721	15697
10°	16178	15189	15033
15°	15953	14635	14309
20°	15696	14022	13592
25°	15362	13373	12824
30°	14997	12702	12018
35°	14614	12016	11216
40°	14214	11298	10428
45°	13773	10596	9603
50°	13326	9815	8776
55°	12751	9001	7939
60°	12158	8103	7047
65°	11603	7132	6116
70°	10802	6054	5032
75°	9647	4793	3906
80°	8333	3369	2763
85°	6493	1810	1383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13773 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	2.1
10°-20°	402.7	5.8
20°-30°	594.7	8.6
30°-40°	694.6	10.1
40°-50°	698.3	10.1
50°-60°	613.4	8.9
60°-70°	456.8	6.6
70°-80°	260.0	3.8
80°-90°	75.8	1.1
90°-100°	34.1	0.5
100°-110°	165.2	2.4
110°-120°	404.7	5.9
120°-130°	513.8	7.5
130°-140°	548.9	8.0
140°-150°	513.2	7.4
150°-160°	414.0	6.0
160°-170°	267.2	3.9
170°-180°	92.1	1.3
0°-30°	1140.0	16.5
0°-40°	1834.6	26.6
0°-60°	3146.3	45.7
0°-90°	3938.9	57.2
90°-120°	604.0	8.8
90°-150°	2179.9	31.6
90°-180°	2953.0	42.8
0°-180°	6892.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1514	1508	1493	1506	1504	144
15°	1441	1436	1419	1430	1422	406
25°	1308	1301	1284	1285	1281	603
35°	1132	1124	1107	1099	1093	708
45°	927	922	905	890	883	716
55°	704	702	686	671	665	630
65°	480	474	460	450	446	474
75°	254	248	244	238	234	271
85°	68	65	65	62	62	73
90°	1	8	17	20	22	7
95°	44	14	22	27	27	52
105°	214	222	158	30	32	227
115°	402	407	413	420	423	397
125°	567	573	576	577	579	507
135°	706	710	713	715	713	544
145°	815	820	821	823	823	510
155°	897	896	897	900	896	414
165°	946	944	944	949	944	267
175°	969	965	966	971	965	92
180°	969	969	969	969	969	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1519.2	1514.0	1499.7	1512.7	1511.4
5°	1514.0	1507.5	1493.2	1506.2	1503.6
7.5°	1502.3	1495.8	1481.5	1493.2	1491.9
10°	1486.7	1480.2	1463.3	1475.0	1472.4
12.5°	1465.9	1460.7	1445.1	1452.9	1451.6
15°	1441.2	1436.0	1419.1	1429.5	1421.7
17.5°	1413.9	1407.4	1390.5	1398.3	1395.7
20°	1382.7	1374.9	1358.0	1363.2	1359.3
22.5°	1347.6	1339.7	1322.8	1326.7	1321.5
25°	1308.5	1300.7	1283.8	1285.1	1281.2
27.5°	1268.2	1260.4	1242.2	1243.5	1239.6
30°	1224.0	1217.5	1199.3	1199.3	1190.2
32.5°	1179.8	1170.7	1157.6	1148.5	1144.6
35°	1131.6	1123.8	1106.9	1099.1	1092.6
37.5°	1083.5	1073.1	1056.2	1047.1	1043.2
40°	1032.8	1025.0	1006.8	996.4	991.2
42.5°	982.0	972.9	954.7	944.3	939.1
45°	927.4	922.2	905.3	889.7	883.2
47.5°	874.1	866.3	850.7	835.1	829.9
50°	819.5	813.0	796.0	781.7	773.9
52.5°	762.2	758.3	740.1	728.4	720.6
55°	703.7	702.4	685.5	671.2	664.7
57.5°	649.1	643.9	630.9	617.8	610.0
60°	589.2	587.9	572.3	560.6	554.1
62.5°	535.9	532.0	516.4	504.7	500.8
65°	480.0	473.5	460.5	450.1	446.1
67.5°	420.1	414.9	404.5	395.4	390.2
70°	366.8	359.0	351.2	342.1	335.6
72.5°	310.9	305.7	296.6	288.8	286.2
75°	253.6	248.4	244.5	238.0	234.1
77.5°	202.9	200.3	195.1	189.9	189.9
80°	153.5	149.6	147.0	145.7	145.7
82.5°	105.4	105.4	105.4	102.8	101.5
85°	67.6	65.0	65.0	62.4	62.4
87.5°	33.8	29.9	28.6	27.3	27.3
90°	0.7	7.9	17.3	20.2	21.6
92.5°	16.6	12.2	18.7	23.7	24.5
95°	43.9	14.4	22.3	27.3	27.3
97.5°	79.9	59.7	23.0	28.8	29.5
100°	121.6	136.0	23.7	29.5	30.2
102.5°	169.1	178.5	53.3	29.5	30.9
105°	214.5	222.4	157.6	30.2	31.7
107.5°	262.7	269.2	279.9	169.1	74.8
110°	310.9	316.7	324.6	300.8	197.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	357.0	362.0	369.9	376.4	374.9
115°	402.3	406.6	413.1	420.3	423.2
117.5°	446.9	451.9	455.5	461.3	462.0
120°	487.9	494.4	496.6	502.3	502.3
122.5°	529.7	534.7	537.6	541.2	541.9
125°	567.1	572.9	575.7	577.2	578.6
127.5°	604.5	610.3	613.9	616.0	614.6
130°	639.1	644.8	647.7	650.6	649.1
132.5°	672.2	677.9	680.1	683.0	680.8
135°	706.0	710.3	713.2	715.3	713.2
137.5°	734.8	740.5	742.0	745.6	744.1
140°	763.6	767.9	770.0	772.9	771.5
142.5°	790.2	794.5	796.7	798.8	796.7
145°	814.7	819.7	821.1	822.6	822.6
147.5°	838.4	842.0	843.4	844.9	841.3
150°	860.0	862.2	863.6	865.0	862.9
152.5°	879.4	880.1	880.9	883.7	880.1
155°	897.4	896.0	896.7	900.3	896.0
157.5°	911.8	911.8	911.1	915.4	909.7
160°	924.8	924.0	923.3	927.6	922.6
162.5°	937.0	934.8	934.1	939.2	934.8
165°	946.4	944.2	943.5	949.2	944.2
167.5°	954.3	951.4	951.4	957.2	951.4
170°	960.8	957.9	957.9	963.6	957.9
172.5°	965.1	961.5	962.2	967.9	961.5
175°	968.7	965.1	965.8	970.8	965.1
177.5°	970.1	966.5	967.2	973.0	965.8
180°	968.7	968.7	968.7	968.7	968.7

(END OF REPORT)