

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: P1031407

Luminaire Tested: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031407
REPORT IS A COMBINATION OF REPORTS P990847 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-F1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

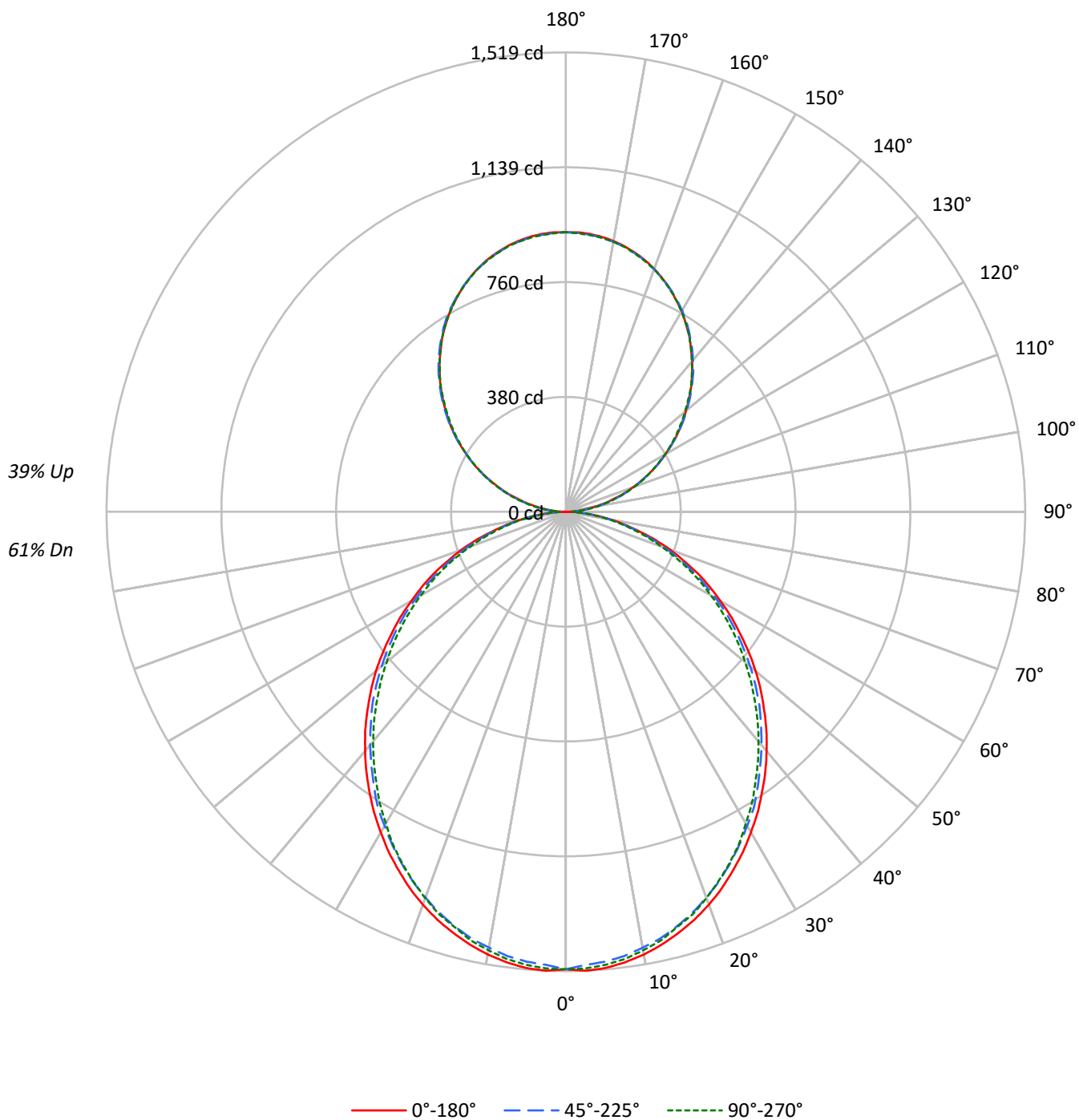
Lumens per Lamp: N/A
Luminaire Lumens: 6500.0 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P1031407

CATALOG NUMBER: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

Luminous Intensity Polar Plot



TEST NUMBER: P1031407

CATALOG NUMBER: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

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		89	89	89		77	77	77		66	66	66
1	100	96	92	88		93	90	86	83		78	76	73		68	66	64		58	57	56
2	91	84	77	72		85	78	73	68		68	64	61		59	56	53		51	49	47
3	83	73	66	60		77	69	62	57		60	55	51		53	49	45		45	42	40
4	76	65	57	51		71	61	54	48		54	48	43		47	42	39		40	37	34
5	70	58	50	44		65	55	47	41		48	42	38		42	37	34		36	33	30
6	64	52	44	38		60	49	42	36		43	37	33		38	33	29		33	29	26
7	60	47	39	33		56	44	37	32		39	33	29		35	30	26		30	26	23
8	55	43	35	29		52	40	33	28		36	30	26		32	27	23		28	24	21
9	52	39	31	26		48	37	30	25		33	27	23		29	24	21		26	22	19
10	48	36	29	24		45	34	27	23		30	25	21		27	22	19		24	20	17

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

TEST NUMBER: P1031407

CATALOG NUMBER: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	2.2
10°-20°	402.7	6.2
20°-30°	594.7	9.1
30°-40°	694.6	10.7
40°-50°	698.3	10.7
50°-60°	613.4	9.4
60°-70°	456.8	7.0
70°-80°	260.0	4.0
80°-90°	75.9	1.2
90°-100°	59.5	0.9
100°-110°	180.1	2.8
110°-120°	306.6	4.7
120°-130°	403.3	6.2
130°-140°	453.4	7.0
140°-150°	445.7	6.9
150°-160°	375.2	5.8
160°-170°	249.8	3.8
170°-180°	87.5	1.3
0°-30°	1140.0	17.5
0°-40°	1834.6	28.2
0°-60°	3146.3	48.4
0°-90°	3939.0	60.6
90°-120°	546.2	8.4
90°-150°	1848.5	28.4
90°-180°	2561.0	39.4
0°-180°	6500.0	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	8
95°	43	48	54	57	57	47
105°	163	165	171	171	173	175
115°	309	311	309	310	309	305
125°	452	454	452	449	446	403
135°	586	590	590	587	585	451
145°	711	712	714	714	711	444
155°	814	814	815	818	812	375
165°	886	884	884	889	884	250
175°	922	919	919	924	918	88
180°	924	924	924	924	924	

TEST NUMBER: P1031407

CATALOG NUMBER: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

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	8.0	17.4	20.3	21.8
92.5°	21.8	26.1	30.5	32.7	31.2
95°	42.8	47.9	53.7	56.6	56.6
97.5°	70.4	74.1	78.4	82.0	81.3
100°	98.7	103.1	106.7	108.9	110.4
102.5°	131.4	133.6	138.7	140.9	140.1
105°	163.4	164.8	171.4	171.4	172.8
107.5°	201.1	201.8	204.8	206.9	206.2
110°	236.0	237.4	238.9	241.8	240.3

TEST NUMBER: P1031407

CATALOG NUMBER: S123DIW-B1000D755UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.3	273.0	273.0	276.6	276.6
115°	308.6	310.8	309.3	310.0	309.3
117.5°	345.6	346.3	344.9	344.9	342.7
120°	379.7	384.1	380.5	379.7	378.3
122.5°	415.3	418.2	416.8	414.6	412.4
125°	451.6	453.8	452.3	449.4	446.5
127.5°	485.0	489.4	487.9	483.6	480.7
130°	518.4	524.2	522.0	519.1	514.1
132.5°	551.8	557.6	556.2	552.5	548.9
135°	585.9	590.3	589.6	586.7	585.2
137.5°	617.2	620.8	623.0	619.3	617.2
140°	649.8	653.5	654.2	653.5	648.4
142.5°	679.6	683.2	684.7	684.0	680.3
145°	710.8	712.3	714.5	713.7	710.8
147.5°	737.7	740.6	742.8	742.8	738.4
150°	766.0	767.5	768.9	768.9	764.6
152.5°	789.2	791.4	792.1	793.6	790.0
155°	813.9	813.9	814.7	817.6	812.5
157.5°	835.0	834.3	835.0	837.9	833.5
160°	854.6	853.1	853.1	856.8	853.9
162.5°	872.0	869.8	870.6	874.2	869.1
165°	886.5	884.4	884.4	888.7	883.6
167.5°	898.9	896.0	896.7	901.1	896.7
170°	909.0	906.1	906.1	911.2	906.1
172.5°	917.0	914.1	914.1	918.5	913.4
175°	922.1	919.2	919.2	923.6	918.5
177.5°	925.0	922.1	922.1	926.5	921.4
180°	924.3	924.3	924.3	924.3	924.3

(END OF REPORT)