

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: P1031711

Luminaire Tested: S123DIW-B560D1030UB35-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031711
REPORT IS A COMBINATION OF REPORTS P991552 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB35-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

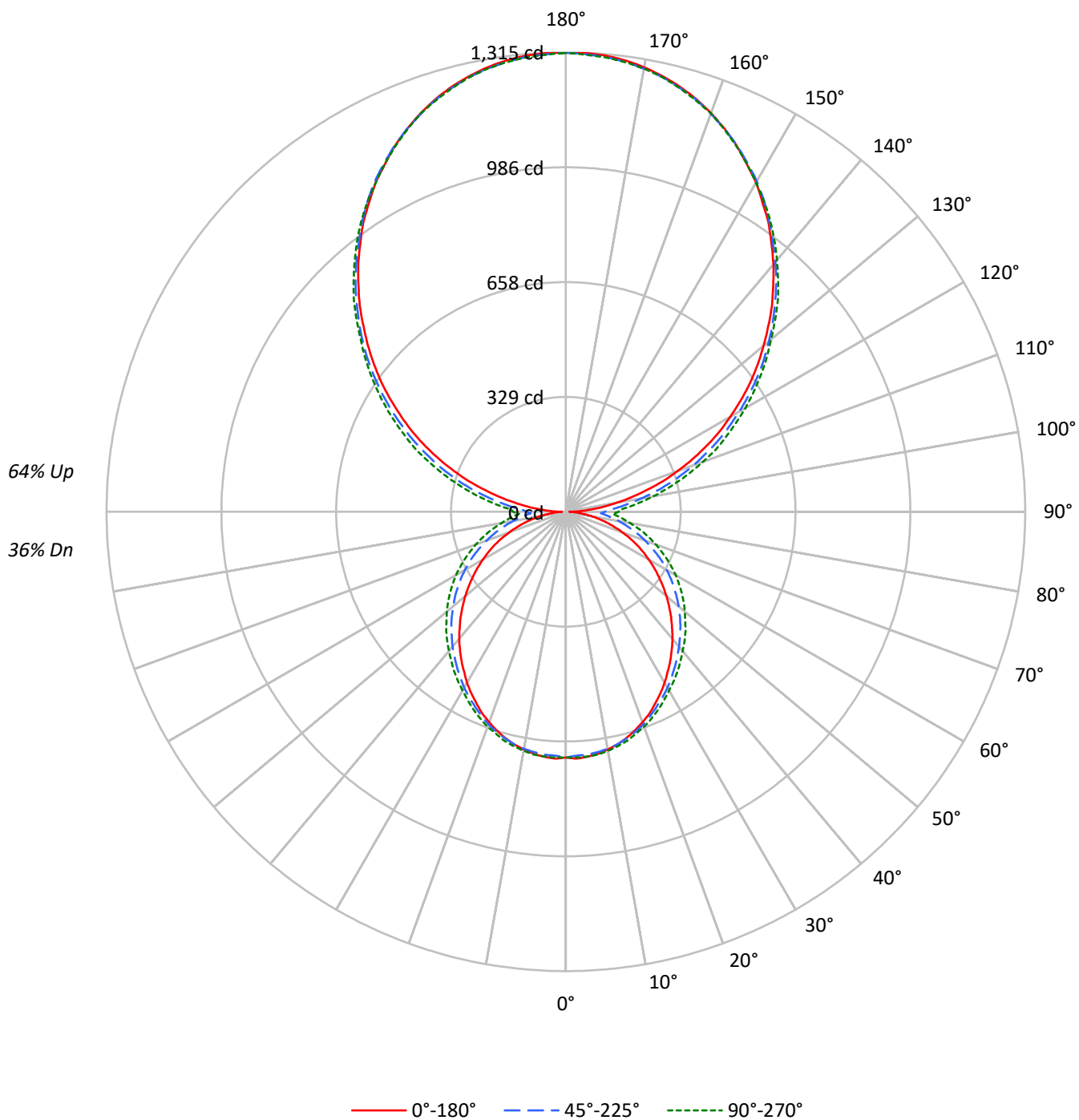
Lumens per Lamp: N/A
Luminaire Lumens: 6007.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 55.5
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

TEST NUMBER: P1031711

CATALOG NUMBER: S123DIW-B560D1030UB35-4F0-XX-W2A-D1

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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43
1	94	89	85	82	85	81	77	74	65	63	60	50	49	47	37	36	35
2	85	78	71	66	77	70	65	60	57	53	49	44	41	39	32	30	29
3	77	68	60	55	70	62	55	50	50	45	41	39	35	33	28	26	24
4	71	60	52	46	64	54	47	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	34	54	43	36	31	35	30	26	27	24	21	20	18	16
7	55	43	35	29	49	39	32	27	32	26	23	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7571	7571	7571
5°	7592	7349	7343
10°	7521	7150	7096
15°	7422	6930	6833
20°	7280	6686	6550
25°	7106	6410	6259
30°	6929	6160	5965
35°	6728	5898	5726
40°	6539	5658	5474
45°	6327	5426	5266
50°	6117	5196	5039
55°	5887	4961	4832
60°	5660	4719	4619
65°	5427	4462	4371
70°	5077	4173	4113
75°	4633	3846	3847
80°	4121	3512	3546
85°	3602	3244	3329

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6327 cd/sqm

TEST NUMBER: P1031711

CATALOG NUMBER: S123DIW-B560D1030UB35-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.1
10°-20°	190.2	3.2
20°-30°	284.5	4.7
30°-40°	339.6	5.7
40°-50°	355.4	5.9
50°-60°	333.5	5.6
60°-70°	278.5	4.6
70°-80°	199.2	3.3
80°-90°	121.3	2.0
90°-100°	159.0	2.6
100°-110°	310.7	5.2
110°-120°	472.3	7.9
120°-130°	594.1	9.9
130°-140°	653.7	10.9
140°-150°	635.5	10.6
150°-160°	533.4	8.9
160°-170°	355.1	5.9
170°-180°	124.3	2.1
0°-30°	541.4	9.0
0°-40°	881.0	14.7
0°-60°	1569.9	26.1
0°-90°	2168.9	36.1
90°-120°	942.1	15.7
90°-150°	2825.4	47.0
90°-180°	3838.0	63.9
0°-180°	6007.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	703	703	703	703	703	
5°	704	703	698	704	703	67
15°	670	673	672	680	679	189
25°	605	613	615	625	625	279
35°	521	533	543	555	558	326
45°	426	444	464	478	484	329
55°	325	350	378	398	405	291
65°	224	254	288	311	319	222
75°	122	158	196	221	231	130
85°	38	76	116	142	150	39
90°	11	59	111	142	151	12
95°	69	106	152	180	188	74
105°	238	259	301	322	331	255
115°	442	455	480	500	505	438
125°	644	647	668	679	681	575
135°	834	840	847	857	859	643
145°	1011	1012	1016	1021	1020	631
155°	1157	1157	1158	1162	1155	533
165°	1260	1257	1257	1263	1256	355
175°	1311	1306	1306	1313	1306	125
180°	1314	1314	1314	1314	1314	

TEST NUMBER: P1031711

CATALOG NUMBER: S123DIW-B560D1030UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	703.4	703.4	703.4	703.4	703.4
2.5°	707.2	704.9	698.8	704.9	704.2
5°	704.2	702.6	698.0	704.2	703.4
7.5°	698.8	698.8	694.2	701.9	701.1
10°	691.1	692.7	688.8	696.5	695.0
12.5°	682.0	684.3	682.0	688.8	687.3
15°	670.5	672.8	672.0	679.7	678.9
17.5°	656.7	661.3	660.5	667.4	665.9
20°	641.3	645.9	647.5	654.4	655.1
22.5°	625.3	629.8	632.1	641.3	640.6
25°	605.3	613.0	615.3	625.3	625.3
27.5°	586.2	594.6	599.2	607.6	608.4
30°	565.5	575.4	581.6	590.8	590.8
32.5°	542.5	554.0	562.4	572.4	574.7
35°	521.0	533.3	543.3	554.8	557.8
37.5°	498.1	511.8	523.3	536.4	538.7
40°	475.1	488.9	504.2	517.2	520.3
42.5°	449.8	467.4	483.5	498.1	502.7
45°	426.0	444.4	463.6	478.1	484.3
47.5°	400.7	421.4	442.9	459.0	463.6
50°	376.2	397.7	421.4	439.1	444.4
52.5°	350.2	373.2	400.0	418.4	425.3
55°	324.9	350.2	377.8	398.4	404.6
57.5°	300.4	326.4	356.3	377.0	383.9
60°	274.3	301.9	333.3	354.8	363.2
62.5°	249.8	278.1	311.9	333.3	341.0
65°	224.5	254.4	288.1	311.1	318.8
67.5°	199.2	230.6	264.4	289.6	295.8
70°	172.4	205.4	242.1	266.7	274.3
72.5°	147.9	180.8	219.1	244.4	252.1
75°	121.8	157.8	196.2	221.4	230.6
77.5°	99.6	135.6	173.9	200.8	207.7
80°	75.9	113.4	153.2	179.3	187.0
82.5°	55.2	93.5	134.1	160.1	167.8
85°	37.5	75.9	116.5	142.5	150.2
87.5°	23.0	61.3	100.4	126.4	134.1
90°	11.0	58.9	111.4	141.5	151.3
92.5°	40.2	79.3	123.8	152.1	157.0
95°	69.3	106.4	152.3	180.1	187.8
97.5°	107.8	140.5	182.8	210.8	217.5
100°	147.3	177.9	218.4	243.7	253.4
102.5°	192.9	217.5	259.2	283.7	290.4
105°	238.3	258.8	301.1	322.5	331.4
107.5°	291.3	308.4	343.9	367.7	373.6
110°	340.0	355.9	388.5	412.7	416.7

TEST NUMBER: P1031711

CATALOG NUMBER: S123DIW-B560D1030UB35-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.6	403.3	432.4	456.8	463.7
115°	442.4	454.7	480.2	499.7	504.7
117.5°	495.0	502.3	526.2	544.6	547.6
120°	542.9	552.8	573.0	589.6	592.9
122.5°	593.4	599.0	620.8	634.5	636.8
125°	644.2	647.3	667.5	679.4	680.7
127.5°	691.7	697.1	714.2	723.3	724.6
130°	739.2	746.6	758.9	769.3	766.7
132.5°	785.8	794.1	803.5	812.2	812.4
135°	834.3	839.8	847.2	856.9	858.6
137.5°	878.7	883.2	891.6	898.7	899.4
140°	924.5	929.6	933.0	943.4	940.0
142.5°	966.8	971.1	973.2	982.2	980.8
145°	1011.2	1012.4	1015.5	1020.6	1019.6
147.5°	1048.5	1052.7	1055.8	1058.1	1055.0
150°	1088.8	1090.9	1092.9	1092.9	1088.2
152.5°	1121.8	1124.9	1125.9	1128.0	1122.8
155°	1156.9	1156.9	1157.9	1162.1	1154.8
157.5°	1186.8	1185.8	1186.8	1191.0	1184.8
160°	1214.7	1212.6	1212.6	1217.8	1213.7
162.5°	1239.5	1236.4	1237.4	1242.6	1235.3
165°	1260.1	1257.0	1257.0	1263.2	1256.0
167.5°	1277.7	1273.5	1274.6	1280.7	1274.6
170°	1292.1	1288.0	1288.0	1295.2	1288.0
172.5°	1303.5	1299.3	1299.3	1305.5	1298.3
175°	1310.7	1306.5	1306.5	1312.7	1305.5
177.5°	1314.8	1310.7	1310.7	1316.9	1309.6
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)