

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: P1031712

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031712
REPORT IS A COMBINATION OF REPORTS P991554 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB35-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

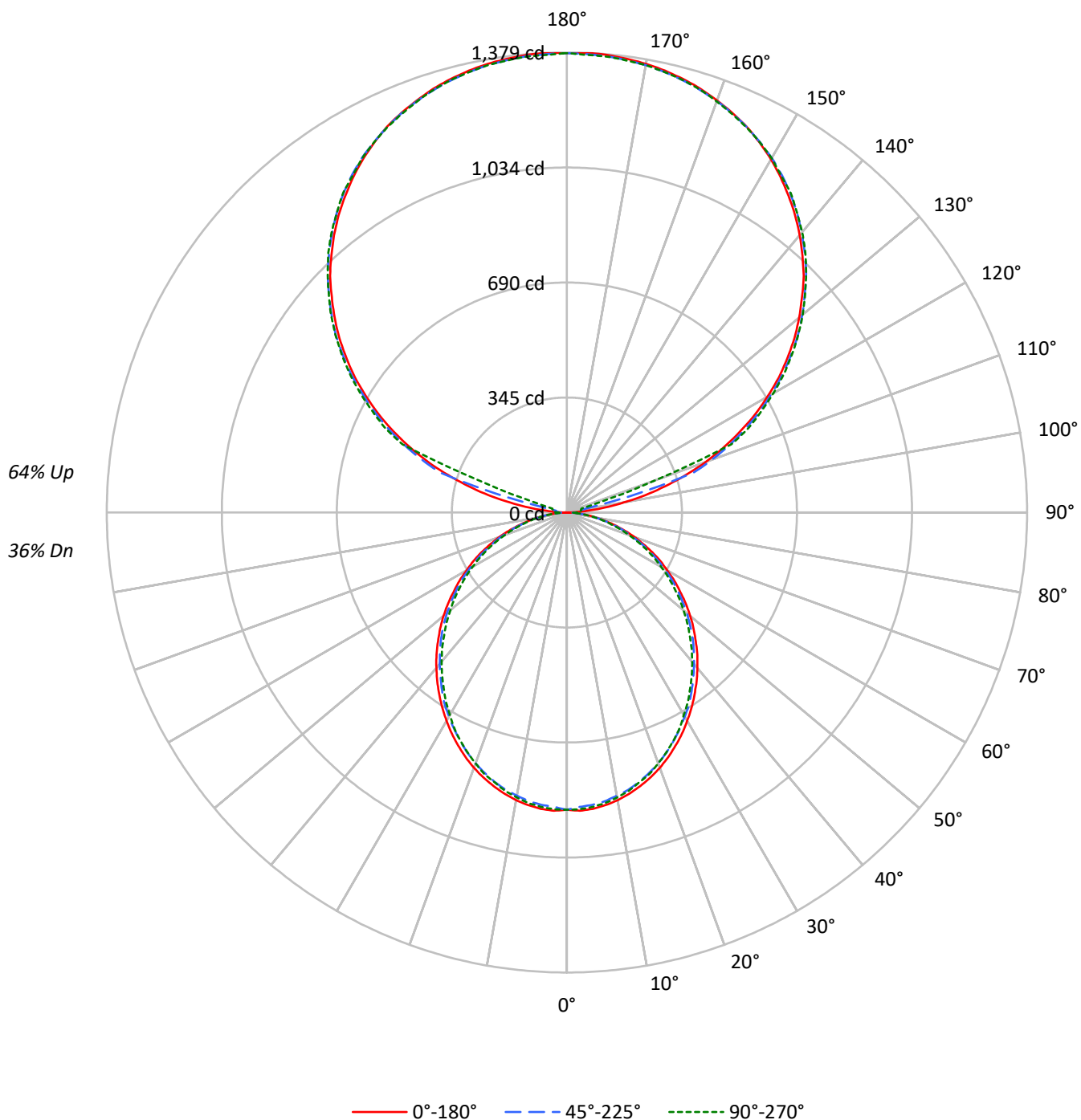
Lumens per Lamp: N/A
Luminaire Lumens: 6520.0 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43
1	95	90	86	83	85	82	79	76	66	64	62	51	50	48	38	37	36
2	86	79	73	68	78	71	66	62	58	54	51	45	43	40	33	32	30
3	78	69	62	56	71	63	57	52	51	46	43	40	37	34	29	27	26
4	72	61	53	48	65	56	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	32	28	25	24	21	19
6	60	49	41	35	54	44	37	32	36	31	27	29	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	20	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	17	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9591	9591	9591
5°	9615	9261	9246
10°	9529	8946	8855
15°	9397	8621	8428
20°	9245	8259	8005
25°	9049	7877	7554
30°	8834	7482	7078
35°	8609	7078	6607
40°	8372	6654	6142
45°	8113	6241	5656
50°	7849	5781	5170
55°	7510	5302	4676
60°	7162	4773	4151
65°	6834	4200	3603
70°	6364	3567	2964
75°	5683	2823	2301
80°	4908	1985	1627
85°	3823	1067	816

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8113 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.0	1.3
10°-20°	237.2	3.6
20°-30°	350.3	5.4
30°-40°	409.1	6.3
40°-50°	411.3	6.3
50°-60°	361.3	5.5
60°-70°	269.1	4.1
70°-80°	153.1	2.3
80°-90°	46.3	0.7
90°-100°	48.6	0.7
100°-110°	234.8	3.6
110°-120°	575.4	8.8
120°-130°	730.4	11.2
130°-140°	780.3	12.0
140°-150°	729.6	11.2
150°-160°	588.5	9.0
160°-170°	379.8	5.8
170°-180°	130.9	2.0
0°-30°	671.5	10.3
0°-40°	1080.6	16.6
0°-60°	1853.3	28.4
0°-90°	2321.8	35.6
90°-120°	858.7	13.2
90°-150°	3099.0	47.5
90°-180°	4198.0	64.4
0°-180°	6520.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	892	888	880	887	886	85
15°	849	846	836	842	837	239
25°	771	766	756	757	755	355
35°	667	662	652	647	644	417
45°	546	543	533	524	520	422
55°	414	414	404	395	392	371
65°	283	279	271	265	263	279
75°	149	146	144	140	138	160
85°	40	38	38	37	37	43
90°	1	11	25	29	31	6
95°	62	20	32	39	39	75
105°	305	316	224	43	45	323
115°	572	578	587	598	602	565
125°	806	814	818	820	823	720
135°	1004	1010	1014	1017	1014	773
145°	1158	1165	1167	1169	1169	725
155°	1276	1274	1275	1280	1274	588
165°	1345	1342	1341	1350	1342	380
175°	1377	1372	1373	1380	1372	131
180°	1377	1377	1377	1377	1377	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	891.0	891.0	891.0	891.0	891.0
2.5°	894.9	891.8	883.4	891.0	890.3
5°	891.8	888.0	879.6	887.2	885.7
7.5°	884.9	881.1	872.7	879.6	878.8
10°	875.7	871.9	861.9	868.8	867.3
12.5°	863.5	860.4	851.2	855.8	855.0
15°	848.9	845.8	835.9	842.0	837.4
17.5°	832.8	829.0	819.0	823.6	822.1
20°	814.4	809.8	799.9	802.9	800.6
22.5°	793.7	789.1	779.2	781.5	778.4
25°	770.8	766.2	756.2	757.0	754.7
27.5°	747.0	742.4	731.7	732.5	730.2
30°	721.0	717.1	706.4	706.4	701.0
32.5°	694.9	689.5	681.9	676.5	674.2
35°	666.6	662.0	652.0	647.4	643.6
37.5°	638.2	632.1	622.1	616.8	614.5
40°	608.3	603.7	593.0	586.9	583.8
42.5°	578.5	573.1	562.4	556.2	553.2
45°	546.3	543.2	533.2	524.1	520.2
47.5°	514.9	510.3	501.1	491.9	488.8
50°	482.7	478.9	468.9	460.5	455.9
52.5°	449.0	446.7	435.9	429.1	424.5
55°	414.5	413.7	403.8	395.3	391.5
57.5°	382.3	379.3	371.6	363.9	359.3
60°	347.1	346.3	337.1	330.2	326.4
62.5°	315.7	313.4	304.2	297.3	295.0
65°	282.7	278.9	271.2	265.1	262.8
67.5°	247.5	244.4	238.3	232.9	229.8
70°	216.1	211.5	206.9	201.5	197.7
72.5°	183.1	180.0	174.7	170.1	168.6
75°	149.4	146.3	144.0	140.2	137.9
77.5°	119.5	118.0	114.9	111.9	111.9
80°	90.4	88.1	86.6	85.8	85.8
82.5°	62.1	62.1	62.1	60.5	59.8
85°	39.8	38.3	38.3	36.8	36.8
87.5°	19.9	17.6	16.9	16.1	16.1
90°	1.0	11.3	24.6	28.6	30.7
92.5°	23.5	17.4	26.6	33.8	34.8
95°	62.4	20.5	31.7	38.9	38.9
97.5°	113.6	84.9	32.7	40.9	41.9
100°	172.9	193.4	33.8	41.9	43.0
102.5°	240.4	253.7	75.7	41.9	44.0
105°	304.9	316.1	224.1	43.0	45.0
107.5°	373.4	382.6	398.0	240.4	106.4
110°	442.0	450.2	461.4	427.7	281.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	507.5	514.6	525.9	535.1	533.0
115°	571.9	578.1	587.3	597.5	601.6
117.5°	635.4	642.5	647.6	655.8	656.8
120°	693.7	702.9	706.0	714.1	714.1
122.5°	753.0	760.2	764.3	769.4	770.4
125°	806.2	814.4	818.5	820.5	822.6
127.5°	859.4	867.6	872.7	875.8	873.7
130°	908.5	916.7	920.8	924.9	922.9
132.5°	955.6	963.8	966.8	970.9	967.9
135°	1003.7	1009.8	1013.9	1017.0	1013.9
137.5°	1044.6	1052.8	1054.8	1059.9	1057.9
140°	1085.5	1091.7	1094.7	1098.8	1096.8
142.5°	1123.4	1129.5	1132.6	1135.7	1132.6
145°	1158.2	1165.3	1167.4	1169.4	1169.4
147.5°	1191.9	1197.0	1199.1	1201.1	1196.0
150°	1222.6	1225.7	1227.7	1229.8	1226.7
152.5°	1250.2	1251.3	1252.3	1256.4	1251.3
155°	1275.8	1273.8	1274.8	1279.9	1273.8
157.5°	1296.3	1296.3	1295.3	1301.4	1293.2
160°	1314.7	1313.7	1312.7	1318.8	1311.6
162.5°	1332.1	1329.0	1328.0	1335.2	1329.0
165°	1345.4	1342.3	1341.3	1349.5	1342.3
167.5°	1356.7	1352.6	1352.6	1360.7	1352.6
170°	1365.9	1361.8	1361.8	1370.0	1361.8
172.5°	1372.0	1366.9	1367.9	1376.1	1366.9
175°	1377.1	1372.0	1373.0	1380.2	1372.0
177.5°	1379.2	1374.0	1375.1	1383.3	1373.0
180°	1377.1	1377.1	1377.1	1377.1	1377.1

(END OF REPORT)