

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: P1031710

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031710
REPORT IS A COMBINATION OF REPORTS P991551 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-D
Description: Define 3 Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

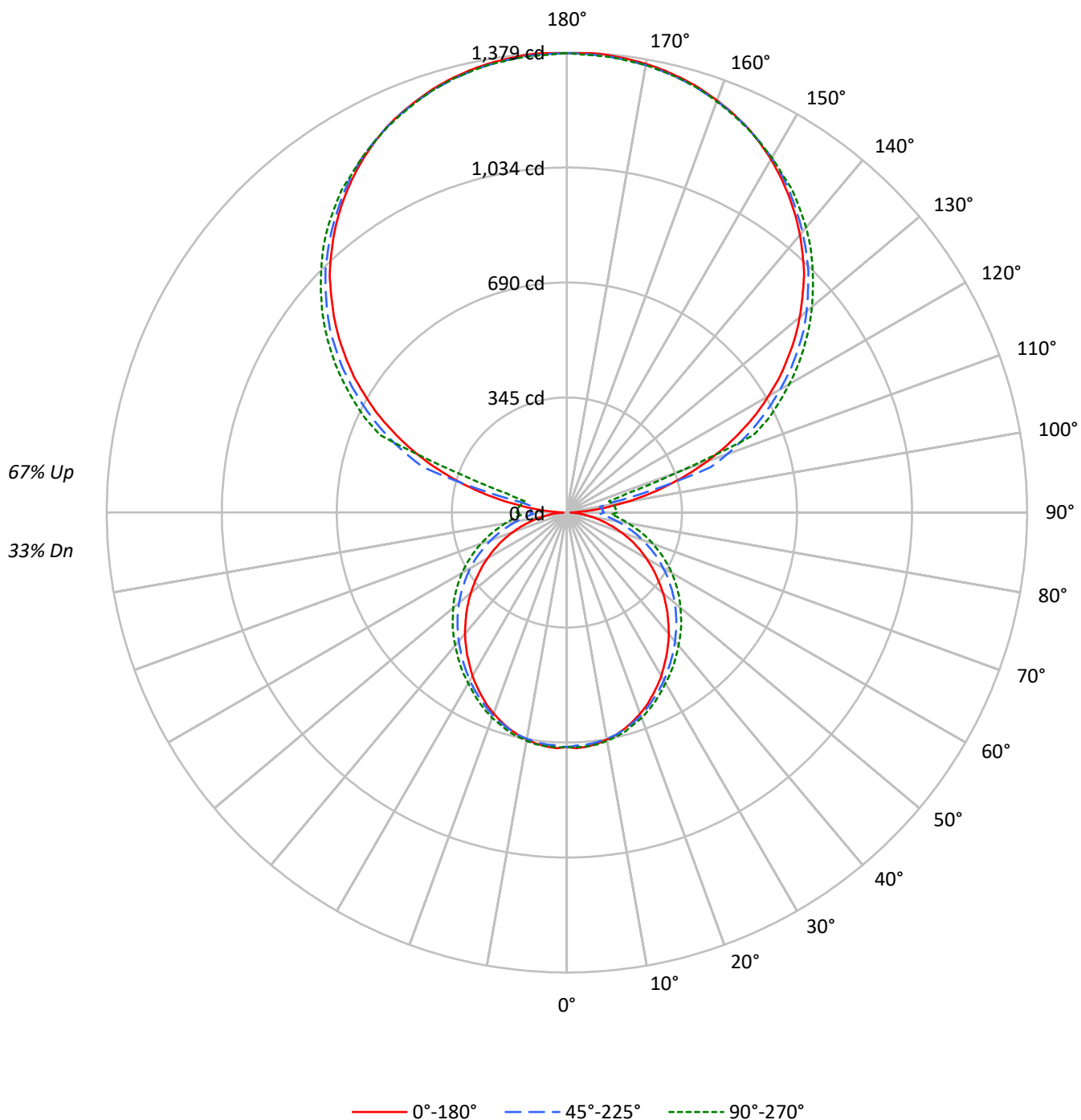
Lumens per Lamp: N/A
Luminaire Lumens: 6565.0 lumens
Efficiency: N/A
Efficacy: 118.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	93	89	85	81	84	80	77	73	64	61	59	49	47	46	35	34	33
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	29	27
3	77	67	60	54	69	61	55	49	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19
5	64	53	45	39	58	48	41	35	38	33	29	29	26	23	21	19	17
6	59	47	39	33	53	43	36	31	34	29	25	26	23	20	19	17	15
7	55	42	35	29	49	38	32	27	31	26	22	24	20	17	17	15	13
8	51	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	12
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10
10	44	32	25	20	39	29	23	18	24	19	15	18	15	12	14	11	9

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	1.0
10°-20°	190.2	2.9
20°-30°	284.5	4.3
30°-40°	339.6	5.2
40°-50°	355.4	5.4
50°-60°	333.5	5.1
60°-70°	278.5	4.2
70°-80°	199.2	3.0
80°-90°	121.3	1.8
90°-100°	123.0	1.9
100°-110°	289.5	4.4
110°-120°	611.9	9.3
120°-130°	751.3	11.4
130°-140°	789.6	12.0
140°-150°	731.6	11.1
150°-160°	588.5	9.0
160°-170°	379.8	5.8
170°-180°	130.9	2.0
0°-30°	541.4	8.2
0°-40°	881.0	13.4
0°-60°	1569.9	23.9
0°-90°	2168.8	33.0
90°-120°	1024.5	15.6
90°-150°	3297.0	50.2
90°-180°	4396.0	67.0
0°-180°	6565.0	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	141	151	11
95°	71	59	108	138	146	81
105°	311	341	282	122	131	329
115°	576	591	628	656	667	569
125°	808	817	843	861	869	723
135°	1005	1011	1023	1040	1041	774
145°	1159	1165	1167	1176	1179	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°	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	58.8	111.2	141.2	151.0
92.5°	32.7	59.5	107.1	139.5	147.4
95°	70.8	58.8	107.6	138.5	146.2
97.5°	121.3	120.1	104.0	135.1	143.8
100°	179.8	224.8	100.5	130.8	139.5
102.5°	246.5	281.3	137.8	125.4	135.2
105°	311.0	340.6	281.6	121.9	130.8
107.5°	378.8	404.1	450.9	314.0	186.9
110°	446.6	468.6	510.4	496.7	356.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	512.1	529.9	570.3	598.7	603.5
115°	575.7	591.1	627.9	656.5	666.7
117.5°	639.2	652.5	683.6	710.2	717.3
120°	696.8	709.8	738.2	763.9	769.3
122.5°	756.1	764.8	792.7	814.6	821.0
125°	808.5	816.7	843.0	861.1	868.6
127.5°	861.7	869.1	893.4	911.8	915.1
130°	910.8	918.2	937.7	956.3	958.9
132.5°	957.1	965.3	979.8	997.7	1000.1
135°	1005.2	1010.6	1023.1	1040.0	1040.7
137.5°	1046.1	1053.6	1060.9	1078.3	1080.1
140°	1086.3	1092.5	1097.8	1113.4	1115.2
142.5°	1124.2	1129.5	1132.6	1145.7	1146.4
145°	1159.0	1165.3	1167.4	1175.5	1178.6
147.5°	1191.9	1197.0	1199.1	1203.4	1201.4
150°	1222.6	1225.7	1227.7	1229.8	1228.2
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)