

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: P1031721

Luminaire Tested: S123DIW-B560D1030UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031721
REPORT IS A COMBINATION OF REPORTS P991572 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1030UB50-4F0-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

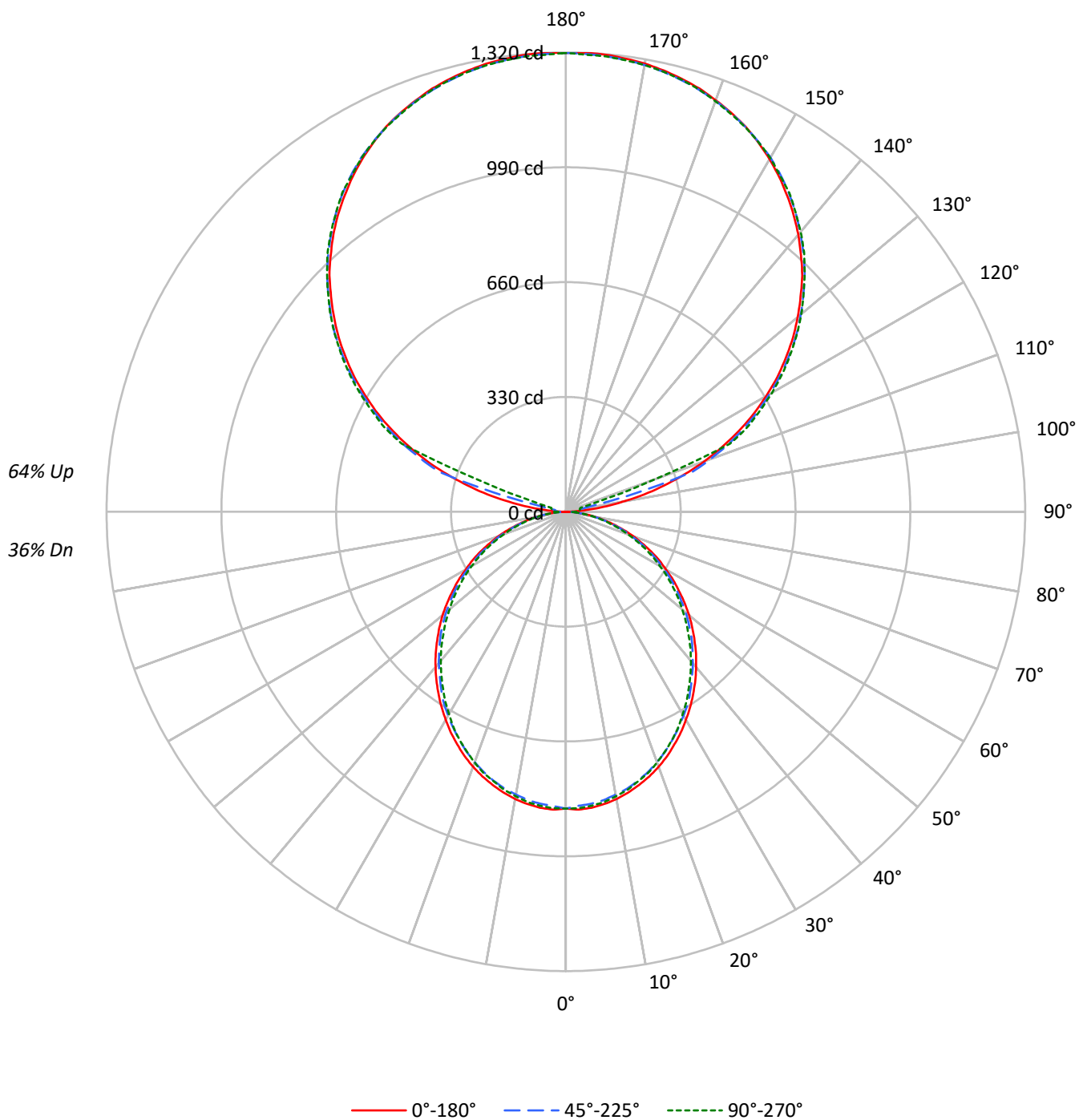
Lumens per Lamp: N/A
Luminaire Lumens: 6242.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	9182	9182	9182
5°	9204	8865	8852
10°	9122	8564	8477
15°	8996	8253	8069
20°	8851	7906	7664
25°	8663	7541	7232
30°	8457	7162	6776
35°	8241	6776	6324
40°	8015	6370	5880
45°	7767	5975	5415
50°	7514	5535	4949
55°	7190	5075	4476
60°	6857	4569	3974
65°	6541	4021	3449
70°	6090	3413	2837
75°	5440	2703	2202
80°	4696	1900	1557
85°	3660	1022	780

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7767 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.4	1.3
10°-20°	227.1	3.6
20°-30°	335.4	5.4
30°-40°	391.7	6.3
40°-50°	393.8	6.3
50°-60°	345.9	5.5
60°-70°	257.6	4.1
70°-80°	146.6	2.3
80°-90°	44.3	0.7
90°-100°	46.5	0.7
100°-110°	224.8	3.6
110°-120°	550.8	8.8
120°-130°	699.3	11.2
130°-140°	747.0	12.0
140°-150°	698.6	11.2
150°-160°	563.5	9.0
160°-170°	363.6	5.8
170°-180°	125.3	2.0
0°-30°	642.8	10.3
0°-40°	1034.5	16.6
0°-60°	1774.1	28.4
0°-90°	2222.6	35.6
90°-120°	822.1	13.2
90°-150°	2967.0	47.5
90°-180°	4019.0	64.4
0°-180°	6242.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	854	850	842	849	848	81
15°	813	810	800	806	802	229
25°	738	734	724	725	722	340
35°	638	634	624	620	616	399
45°	523	520	510	502	498	404
55°	397	396	386	378	375	355
65°	271	267	260	254	252	267
75°	143	140	138	134	132	153
85°	38	37	37	35	35	41
90°	1	11	24	27	29	6
95°	60	20	30	37	37	71
105°	292	303	214	41	43	309
115°	548	553	562	572	576	541
125°	772	780	784	786	788	690
135°	961	967	971	974	971	740
145°	1109	1116	1118	1120	1120	694
155°	1222	1220	1220	1225	1220	563
165°	1288	1285	1284	1292	1285	364
175°	1318	1314	1314	1321	1314	125
180°	1318	1318	1318	1318	1318	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	853.0	853.0	853.0	853.0	853.0
2.5°	856.7	853.7	845.7	853.0	852.3
5°	853.7	850.1	842.0	849.3	847.9
7.5°	847.1	843.5	835.4	842.0	841.3
10°	838.3	834.7	825.1	831.7	830.3
12.5°	826.6	823.7	814.9	819.3	818.5
15°	812.7	809.7	800.2	806.1	801.7
17.5°	797.3	793.6	784.1	788.5	787.0
20°	779.7	775.3	765.7	768.7	766.5
22.5°	759.9	755.5	745.9	748.1	745.2
25°	737.9	733.5	723.9	724.7	722.5
27.5°	715.1	710.7	700.4	701.2	699.0
30°	690.2	686.5	676.2	676.2	671.1
32.5°	665.2	660.1	652.8	647.6	645.4
35°	638.1	633.7	624.2	619.8	616.1
37.5°	611.0	605.1	595.6	590.4	588.2
40°	582.4	578.0	567.7	561.8	558.9
42.5°	553.8	548.6	538.4	532.5	529.6
45°	523.0	520.0	510.5	501.7	498.0
47.5°	492.9	488.5	479.7	470.9	467.9
50°	462.1	458.4	448.9	440.8	436.4
52.5°	429.8	427.6	417.3	410.7	406.3
55°	396.8	396.1	386.5	378.5	374.8
57.5°	366.0	363.1	355.7	348.4	344.0
60°	332.3	331.5	322.7	316.1	312.5
62.5°	302.2	300.0	291.2	284.6	282.4
65°	270.6	267.0	259.6	253.8	251.6
67.5°	236.9	234.0	228.1	223.0	220.0
70°	206.8	202.4	198.0	192.9	189.2
72.5°	175.3	172.4	167.2	162.8	161.4
75°	143.0	140.1	137.9	134.2	132.0
77.5°	114.4	113.0	110.0	107.1	107.1
80°	86.5	84.3	82.9	82.1	82.1
82.5°	59.4	59.4	59.4	57.9	57.2
85°	38.1	36.7	36.7	35.2	35.2
87.5°	19.1	16.9	16.1	15.4	15.4
90°	1.0	10.8	23.5	27.4	29.4
92.5°	22.5	16.7	25.5	32.3	33.3
95°	59.8	19.6	30.4	37.2	37.2
97.5°	108.7	81.3	31.3	39.2	40.2
100°	165.5	185.1	32.3	40.2	41.1
102.5°	230.2	242.9	72.5	40.2	42.1
105°	291.9	302.7	214.5	41.1	43.1
107.5°	357.5	366.3	381.0	230.2	101.9
110°	423.2	431.0	441.8	409.4	269.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	485.8	492.7	503.5	512.3	510.3
115°	547.6	553.4	562.2	572.0	576.0
117.5°	608.3	615.1	620.0	627.9	628.9
120°	664.1	672.9	675.9	683.7	683.7
122.5°	720.9	727.8	731.7	736.6	737.6
125°	771.9	779.7	783.6	785.6	787.5
127.5°	822.8	830.6	835.5	838.5	836.5
130°	869.8	877.7	881.6	885.5	883.5
132.5°	914.9	922.7	925.6	929.6	926.6
135°	960.9	966.8	970.7	973.6	970.7
137.5°	1000.1	1007.9	1009.9	1014.8	1012.8
140°	1039.3	1045.2	1048.1	1052.0	1050.0
142.5°	1075.5	1081.4	1084.3	1087.3	1084.3
145°	1108.8	1115.7	1117.6	1119.6	1119.6
147.5°	1141.1	1146.0	1148.0	1150.0	1145.1
150°	1170.5	1173.5	1175.4	1177.4	1174.4
152.5°	1197.0	1198.0	1198.9	1202.9	1198.0
155°	1221.5	1219.5	1220.5	1225.4	1219.5
157.5°	1241.1	1241.1	1240.1	1246.0	1238.1
160°	1258.7	1257.7	1256.7	1262.6	1255.7
162.5°	1275.3	1272.4	1271.4	1278.3	1272.4
165°	1288.1	1285.1	1284.2	1292.0	1285.1
167.5°	1298.8	1294.9	1294.9	1302.8	1294.9
170°	1307.7	1303.7	1303.7	1311.6	1303.7
172.5°	1313.5	1308.6	1309.6	1317.5	1308.6
175°	1318.4	1313.5	1314.5	1321.4	1313.5
177.5°	1320.4	1315.5	1316.5	1324.3	1314.5
180°	1318.4	1318.4	1318.4	1318.4	1318.4

(END OF REPORT)