

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: P1031719

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031719
REPORT IS A COMBINATION OF REPORTS P991569 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-D
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

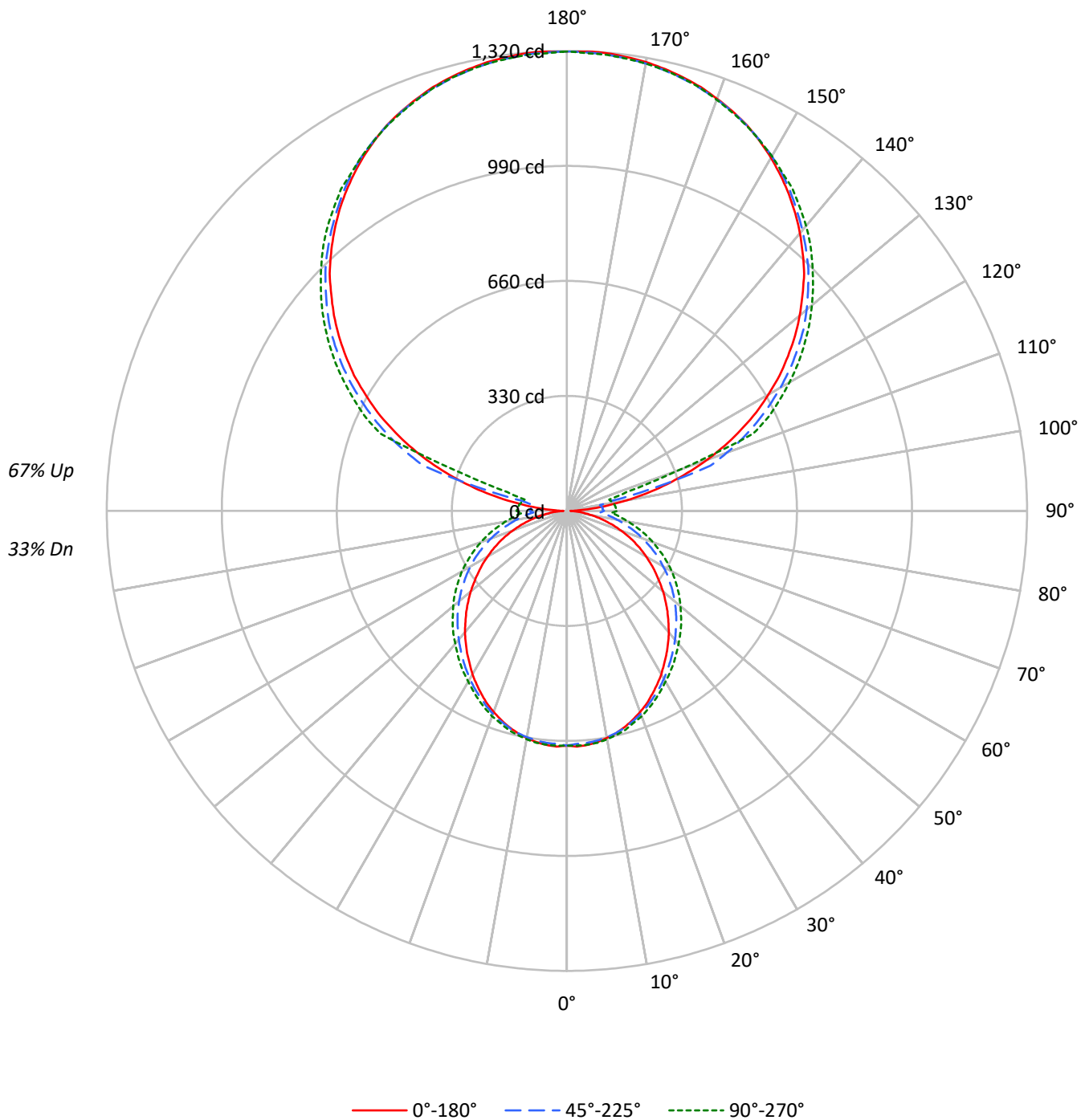
Lumens per Lamp: N/A
Luminaire Lumens: 6285.0 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	28	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°	7248	7248	7248
5°	7268	7035	7030
10°	7200	6845	6793
15°	7104	6634	6541
20°	6969	6400	6270
25°	6803	6136	5991
30°	6632	5896	5710
35°	6442	5646	5482
40°	6259	5416	5239
45°	6056	5195	5041
50°	5856	4974	4824
55°	5635	4748	4626
60°	5419	4518	4422
65°	5195	4272	4183
70°	4859	3996	3937
75°	4435	3681	3684
80°	3941	3363	3395
85°	3448	3105	3187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6056 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.9	1.0
10°-20°	182.1	2.9
20°-30°	272.3	4.3
30°-40°	325.1	5.2
40°-50°	340.2	5.4
50°-60°	319.2	5.1
60°-70°	266.6	4.2
70°-80°	190.7	3.0
80°-90°	116.1	1.8
90°-100°	117.8	1.9
100°-110°	277.2	4.4
110°-120°	585.8	9.3
120°-130°	719.2	11.4
130°-140°	756.0	12.0
140°-150°	700.4	11.1
150°-160°	563.5	9.0
160°-170°	363.6	5.8
170°-180°	125.3	2.0
0°-30°	518.3	8.2
0°-40°	843.4	13.4
0°-60°	1502.8	23.9
0°-90°	2076.2	33.0
90°-120°	980.8	15.6
90°-150°	3156.4	50.2
90°-180°	4209.0	67.0
0°-180°	6285.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	673	673	673	673	673	
5°	674	673	668	674	673	64
15°	642	644	643	651	650	181
25°	580	587	589	598	598	267
35°	499	510	520	531	534	312
45°	408	425	444	458	464	314
55°	311	335	362	381	387	278
65°	215	244	276	298	305	212
75°	117	151	188	212	221	125
85°	36	73	112	136	144	37
90°	10	56	106	135	145	10
95°	68	56	103	133	140	78
105°	298	326	270	117	125	315
115°	551	566	601	628	638	545
125°	774	782	807	824	832	692
135°	962	968	980	996	996	741
145°	1110	1116	1118	1126	1128	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°	673.4	673.4	673.4	673.4	673.4
2.5°	677.0	674.8	669.0	674.8	674.1
5°	674.1	672.6	668.2	674.1	673.4
7.5°	669.0	669.0	664.6	671.9	671.2
10°	661.6	663.1	659.4	666.8	665.3
12.5°	652.8	655.0	652.8	659.4	658.0
15°	641.8	644.0	643.3	650.6	649.9
17.5°	628.6	633.0	632.3	638.9	637.4
20°	613.9	618.3	619.8	626.4	627.1
22.5°	598.5	602.9	605.1	613.9	613.2
25°	579.5	586.8	589.0	598.5	598.5
27.5°	561.1	569.2	573.6	581.7	582.4
30°	541.3	550.9	556.7	565.5	565.5
32.5°	519.3	530.3	538.4	547.9	550.1
35°	498.8	510.5	520.1	531.1	534.0
37.5°	476.8	490.0	501.0	513.5	515.7
40°	454.8	468.0	482.6	495.1	498.0
42.5°	430.6	447.4	462.8	476.8	481.2
45°	407.8	425.4	443.8	457.7	463.6
47.5°	383.6	403.4	424.0	439.4	443.8
50°	360.1	380.7	403.4	420.3	425.4
52.5°	335.2	357.2	382.9	400.5	407.1
55°	311.0	335.2	361.6	381.4	387.3
57.5°	287.5	312.5	341.1	360.9	367.5
60°	262.6	289.0	319.1	339.6	347.7
62.5°	239.1	266.3	298.5	319.1	326.4
65°	214.9	243.5	275.8	297.8	305.1
67.5°	190.7	220.8	253.1	277.3	283.1
70°	165.0	196.6	231.8	255.3	262.6
72.5°	141.6	173.1	209.8	234.0	241.3
75°	116.6	151.1	187.8	212.0	220.8
77.5°	95.4	129.8	166.5	192.2	198.8
80°	72.6	108.6	146.7	171.6	179.0
82.5°	52.8	89.5	128.4	153.3	160.6
85°	35.9	72.6	111.5	136.4	143.8
87.5°	22.0	58.7	96.1	121.0	128.4
90°	10.5	56.3	106.4	135.2	144.6
92.5°	31.3	57.0	102.5	133.5	141.1
95°	67.9	56.3	103.0	132.6	139.9
97.5°	116.0	115.0	99.5	129.4	137.8
100°	172.1	215.2	96.1	125.3	133.5
102.5°	236.1	269.3	131.9	120.2	129.4
105°	297.8	326.2	269.5	116.7	125.3
107.5°	362.6	386.8	431.6	300.6	178.9
110°	427.6	448.6	488.7	475.4	341.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	490.2	507.4	546.0	573.2	577.8
115°	551.3	565.9	601.1	628.5	638.3
117.5°	612.0	624.6	654.5	680.0	686.8
120°	667.0	679.5	706.7	731.4	736.5
122.5°	723.8	732.2	758.8	779.9	786.0
125°	774.1	781.9	807.1	824.5	831.5
127.5°	825.0	832.1	855.3	873.0	876.1
130°	872.0	879.2	897.7	915.6	918.0
132.5°	916.4	924.2	938.1	955.3	957.4
135°	962.4	967.5	979.5	995.6	996.4
137.5°	1001.6	1008.6	1015.8	1032.4	1034.1
140°	1040.0	1045.9	1051.0	1065.9	1067.6
142.5°	1076.2	1081.4	1084.3	1096.8	1097.5
145°	1109.5	1115.7	1117.6	1125.5	1128.4
147.5°	1141.1	1146.0	1148.0	1152.2	1150.2
150°	1170.5	1173.5	1175.4	1177.4	1175.9
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)