

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: P1031777

Luminaire Tested: S123DIW-B560D1535UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031777
REPORT IS A COMBINATION OF REPORTS P991702 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B560D1535UB50-4F0-XX-W2A-D1
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

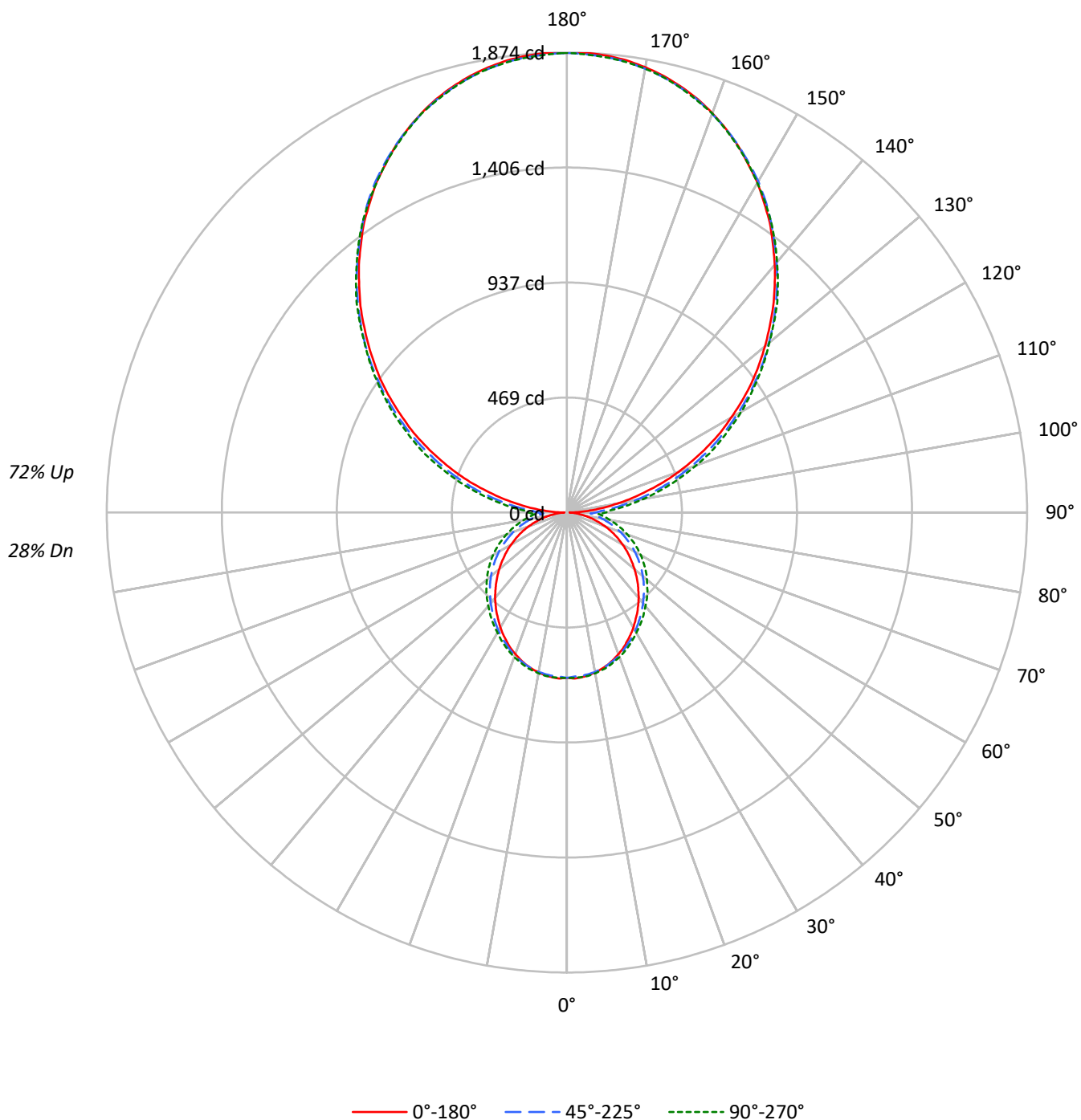
Lumens per Lamp: N/A
Luminaire Lumens: 7456.0 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.25 / 1.37
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 76.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	92	88	84	80	82	79	75	72	61	59	57	45	44	42	31	30	29
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	27	25	24
3	76	67	60	54	68	60	54	49	47	42	39	35	32	29	23	22	20
4	70	59	51	45	62	53	46	41	41	37	33	31	27	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	27	24	21	19	16	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	19	17	15	13
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10
9	46	34	27	22	41	31	25	20	25	20	17	19	15	13	13	11	9
10	43	31	24	20	39	28	22	18	23	18	15	17	14	11	12	10	8

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	0.9
10°-20°	182.1	2.4
20°-30°	272.3	3.7
30°-40°	325.1	4.4
40°-50°	340.2	4.6
50°-60°	319.2	4.3
60°-70°	266.6	3.6
70°-80°	190.7	2.6
80°-90°	117.4	1.6
90°-100°	191.8	2.6
100°-110°	417.3	5.6
110°-120°	656.2	8.8
120°-130°	837.2	11.2
130°-140°	927.5	12.4
140°-150°	904.9	12.1
150°-160°	760.3	10.2
160°-170°	506.1	6.8
170°-180°	177.2	2.4
0°-30°	518.3	7.0
0°-40°	843.4	11.3
0°-60°	1502.8	20.2
0°-90°	2077.5	27.9
90°-120°	1265.3	17.0
90°-150°	3934.9	52.8
90°-180°	5379.0	72.1
0°-180°	7456.0	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°	11	62	118	149	159	13
95°	95	134	182	210	217	102
105°	337	357	402	423	432	360
115°	629	642	666	685	689	623
125°	917	922	940	950	949	818
135°	1189	1197	1203	1211	1211	916
145°	1441	1443	1448	1452	1449	900
155°	1649	1649	1651	1656	1646	759
165°	1796	1792	1792	1801	1790	507
175°	1868	1862	1862	1871	1861	178
180°	1873	1873	1873	1873	1873	

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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°	11.0	61.7	118.2	149.0	159.3
92.5°	52.9	93.3	138.8	167.4	171.1
95°	94.9	133.8	181.5	210.1	217.4
97.5°	150.0	183.8	227.1	256.4	262.4
100°	206.7	239.0	280.1	305.8	316.0
102.5°	272.2	297.1	340.4	365.4	371.2
105°	336.9	357.4	402.2	422.8	432.3
107.5°	412.6	429.5	465.5	489.7	494.8
110°	482.5	498.7	530.9	555.9	558.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	556.1	567.8	595.6	621.4	628.0
115°	628.9	642.1	665.6	684.7	689.0
117.5°	704.0	711.2	733.3	750.9	752.3
120°	772.3	784.8	801.7	817.1	819.3
122.5°	844.4	851.8	871.5	883.3	884.0
125°	917.2	921.7	940.0	949.5	948.7
127.5°	984.9	993.0	1008.4	1014.3	1013.5
130°	1052.6	1063.7	1073.8	1082.0	1076.1
132.5°	1119.6	1131.3	1139.4	1145.2	1143.0
135°	1188.7	1196.7	1203.4	1210.7	1211.4
137.5°	1252.0	1258.5	1268.1	1272.5	1271.8
140°	1317.4	1324.7	1328.4	1337.9	1331.3
142.5°	1377.7	1384.3	1387.3	1395.3	1391.6
145°	1440.9	1443.2	1447.6	1452.0	1449.0
147.5°	1494.7	1500.6	1505.0	1507.2	1501.2
150°	1552.0	1555.0	1557.9	1557.9	1550.6
152.5°	1599.1	1603.5	1605.0	1607.9	1600.6
155°	1649.1	1649.1	1650.6	1656.5	1646.2
157.5°	1691.8	1690.3	1691.8	1697.7	1688.9
160°	1731.5	1728.6	1728.6	1735.9	1730.0
162.5°	1766.8	1762.4	1763.9	1771.2	1760.9
165°	1796.2	1791.8	1791.8	1800.7	1790.4
167.5°	1821.3	1815.4	1816.8	1825.7	1816.8
170°	1841.9	1836.0	1836.0	1846.3	1836.0
172.5°	1858.0	1852.2	1852.2	1861.0	1850.7
175°	1868.3	1862.4	1862.4	1871.3	1861.0
177.5°	1874.2	1868.3	1868.3	1877.2	1866.9
180°	1872.7	1872.7	1872.7	1872.7	1872.7

(END OF REPORT)