

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: P1031182

Luminaire Tested: S123RDIW-B560D1320UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031182
REPORT IS A COMBINATION OF REPORTS P994440 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B560D1320UB2750-4F0-XX-W2A-F_3500K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 3500K BioUP LEDs {m-DER=0.721}
{m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

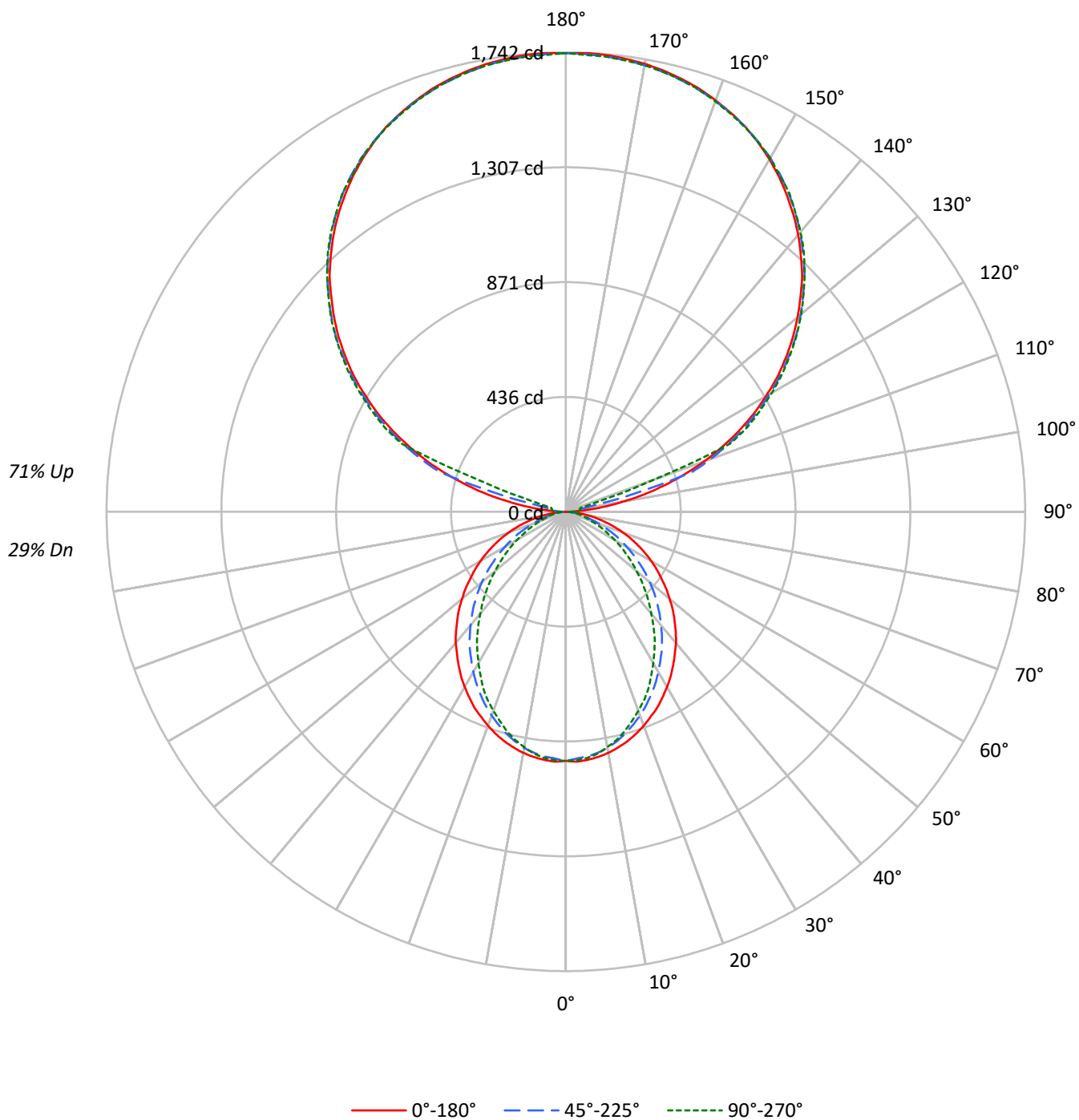
Lumens per Lamp: N/A
Luminaire Lumens: 7439.0 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 66.1
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
RCR																	
0	102	102	102	102	91	91	91	91	72	72	72		53	53	53		37
1	93	89	85	82	83	80	77	74	63	61	59		47	46	45		33
2	85	78	72	67	76	70	65	61	55	52	49		42	39	38		29
3	78	69	62	56	69	62	56	51	49	45	41		37	34	32		26
4	71	61	53	47	63	55	48	43	43	39	35		33	30	27		23
5	65	54	46	41	58	49	42	37	39	34	30		30	26	24		21
6	60	48	41	35	53	44	37	32	35	30	26		27	23	21		19
7	55	44	36	31	49	39	33	28	32	27	23		24	21	18		17
8	51	39	32	27	46	36	29	25	29	24	21		22	19	16		16
9	48	36	29	24	43	33	26	22	26	22	18		20	17	15		15
10	44	33	26	21	40	30	24	20	24	20	16		19	15	13		14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10168	10168	10168
5°	10184	9808	9781
10°	10104	9440	9253
15°	9972	8983	8675
20°	9801	8487	8028
25°	9623	7972	7415
30°	9396	7425	6691
35°	9161	6886	6032
40°	8940	6301	5303
45°	8658	5730	4648
50°	8347	5119	3970
55°	8023	4466	3349
60°	7715	3796	2718
65°	7315	3108	2122
70°	6814	2351	1516
75°	6090	1592	1201
80°	5201	1107	842
85°	3900	599	441

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8658 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.8	1.2
10°-20°	247.0	3.3
20°-30°	355.7	4.8
30°-40°	400.5	5.4
40°-50°	383.1	5.2
50°-60°	313.6	4.2
60°-70°	211.5	2.8
70°-80°	106.1	1.4
80°-90°	31.2	0.4
90°-100°	61.3	0.8
100°-110°	296.5	4.0
110°-120°	726.6	9.8
120°-130°	922.4	12.4
130°-140°	985.3	13.2
140°-150°	921.4	12.4
150°-160°	743.2	10.0
160°-170°	479.6	6.4
170°-180°	165.3	2.2
0°-30°	691.5	9.3
0°-40°	1092.0	14.7
0°-60°	1788.8	24.0
0°-90°	2137.5	28.7
90°-120°	1084.4	14.6
90°-150°	3913.5	52.6
90°-180°	5302.0	71.3
0°-180°	7439.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	945	945	945	945	945	
5°	945	941	932	938	937	90
15°	901	892	871	867	862	254
25°	820	801	765	749	741	377
35°	709	682	634	601	588	444
45°	583	548	490	446	428	450
55°	443	405	340	296	280	397
65°	303	260	201	163	155	299
75°	160	123	81	74	72	171
85°	41	24	22	20	20	44
90°	1	14	31	36	39	7
95°	79	26	40	49	49	94
105°	385	399	283	54	57	408
115°	722	730	742	754	760	713
125°	1018	1028	1034	1036	1039	910
135°	1267	1275	1280	1284	1280	976
145°	1462	1472	1474	1477	1477	916
155°	1611	1608	1610	1616	1608	742
165°	1699	1695	1694	1704	1695	480
175°	1739	1733	1734	1743	1733	166
180°	1739	1739	1739	1739	1739	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	944.6	944.6	944.6	944.6	944.6
2.5°	948.4	945.4	936.2	944.6	943.1
5°	944.6	940.8	931.6	938.5	936.9
7.5°	937.7	933.9	922.4	927.0	924.7
10°	928.5	923.1	909.4	910.1	906.3
12.5°	915.5	909.4	891.7	891.0	886.4
15°	900.9	892.5	871.0	867.2	861.9
17.5°	883.3	874.1	847.3	839.6	832.0
20°	863.4	851.1	822.0	812.1	802.9
22.5°	841.2	826.6	795.2	782.2	773.8
25°	819.7	800.6	765.3	749.2	740.8
27.5°	793.7	773.0	734.7	713.2	700.2
30°	766.9	743.9	701.0	674.9	662.7
32.5°	740.0	713.2	667.3	638.2	625.1
35°	709.4	681.8	634.3	601.4	587.6
37.5°	678.8	648.9	599.1	562.3	545.5
40°	649.6	615.9	561.5	521.7	504.1
42.5°	616.7	583.0	526.3	481.9	466.6
45°	583.0	548.5	489.5	445.9	427.5
47.5°	550.1	511.7	453.5	406.0	389.9
50°	513.3	477.3	415.2	367.7	350.1
52.5°	480.3	440.5	379.2	329.4	314.1
55°	442.8	405.3	340.1	295.7	280.4
57.5°	409.1	368.5	302.6	260.5	247.4
60°	373.9	331.7	268.1	226.8	213.7
62.5°	338.6	296.5	232.9	194.6	180.8
65°	302.6	260.5	200.7	163.2	154.8
67.5°	266.6	223.7	165.5	137.1	127.9
70°	231.4	190.0	136.4	109.6	101.1
72.5°	196.1	155.5	108.0	87.3	85.0
75°	160.1	123.3	81.2	73.5	72.0
77.5°	127.2	93.5	63.6	59.0	57.5
80°	95.8	64.4	48.3	46.0	44.4
82.5°	65.9	39.8	34.5	32.2	32.2
85°	40.6	23.7	21.5	19.9	19.9
87.5°	18.4	10.0	10.0	9.2	8.4
90°	1.3	14.2	31.0	36.2	38.8
92.5°	29.7	22.0	33.6	42.6	43.9
95°	78.8	25.8	40.1	49.1	49.1
97.5°	143.4	107.2	41.3	51.7	53.0
100°	218.3	244.2	42.6	53.0	54.3
102.5°	303.6	320.4	95.6	53.0	55.6
105°	385.0	399.2	282.9	54.3	56.8
107.5°	471.6	483.2	502.6	303.6	134.4
110°	558.1	568.5	582.7	540.0	355.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	640.8	649.9	664.1	675.7	673.1
115°	722.2	730.0	741.6	754.5	759.7
117.5°	802.3	811.4	817.8	828.2	829.5
120°	876.0	887.6	891.5	901.8	901.8
122.5°	950.9	959.9	965.1	971.6	972.9
125°	1018.1	1028.4	1033.6	1036.2	1038.8
127.5°	1085.3	1095.6	1102.1	1105.9	1103.4
130°	1147.3	1157.6	1162.8	1168.0	1165.4
132.5°	1206.7	1217.1	1220.9	1226.1	1222.2
135°	1267.4	1275.2	1280.4	1284.2	1280.4
137.5°	1319.1	1329.5	1332.0	1338.5	1335.9
140°	1370.8	1378.5	1382.4	1387.6	1385.0
142.5°	1418.6	1426.4	1430.2	1434.1	1430.2
145°	1462.5	1471.6	1474.2	1476.7	1476.7
147.5°	1505.2	1511.6	1514.2	1516.8	1510.3
150°	1543.9	1547.8	1550.4	1553.0	1549.1
152.5°	1578.8	1580.1	1581.4	1586.6	1580.1
155°	1611.1	1608.5	1609.8	1616.3	1608.5
157.5°	1636.9	1636.9	1635.7	1643.4	1633.1
160°	1660.2	1658.9	1657.6	1665.4	1656.3
162.5°	1682.2	1678.3	1677.0	1686.0	1678.3
165°	1699.0	1695.1	1693.8	1704.1	1695.1
167.5°	1713.2	1708.0	1708.0	1718.3	1708.0
170°	1724.8	1719.6	1719.6	1730.0	1719.6
172.5°	1732.6	1726.1	1727.4	1737.7	1726.1
175°	1739.0	1732.6	1733.8	1742.9	1732.6
177.5°	1741.6	1735.1	1736.4	1746.8	1733.8
180°	1739.0	1739.0	1739.0	1739.0	1739.0

(END OF REPORT)