

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: P1031103

Luminaire Tested: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031103
REPORT IS A COMBINATION OF REPORTS P994090 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1165D460UB2750-4F0-XX-W2A-F_5000K
Description: Define 3 Regressed Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

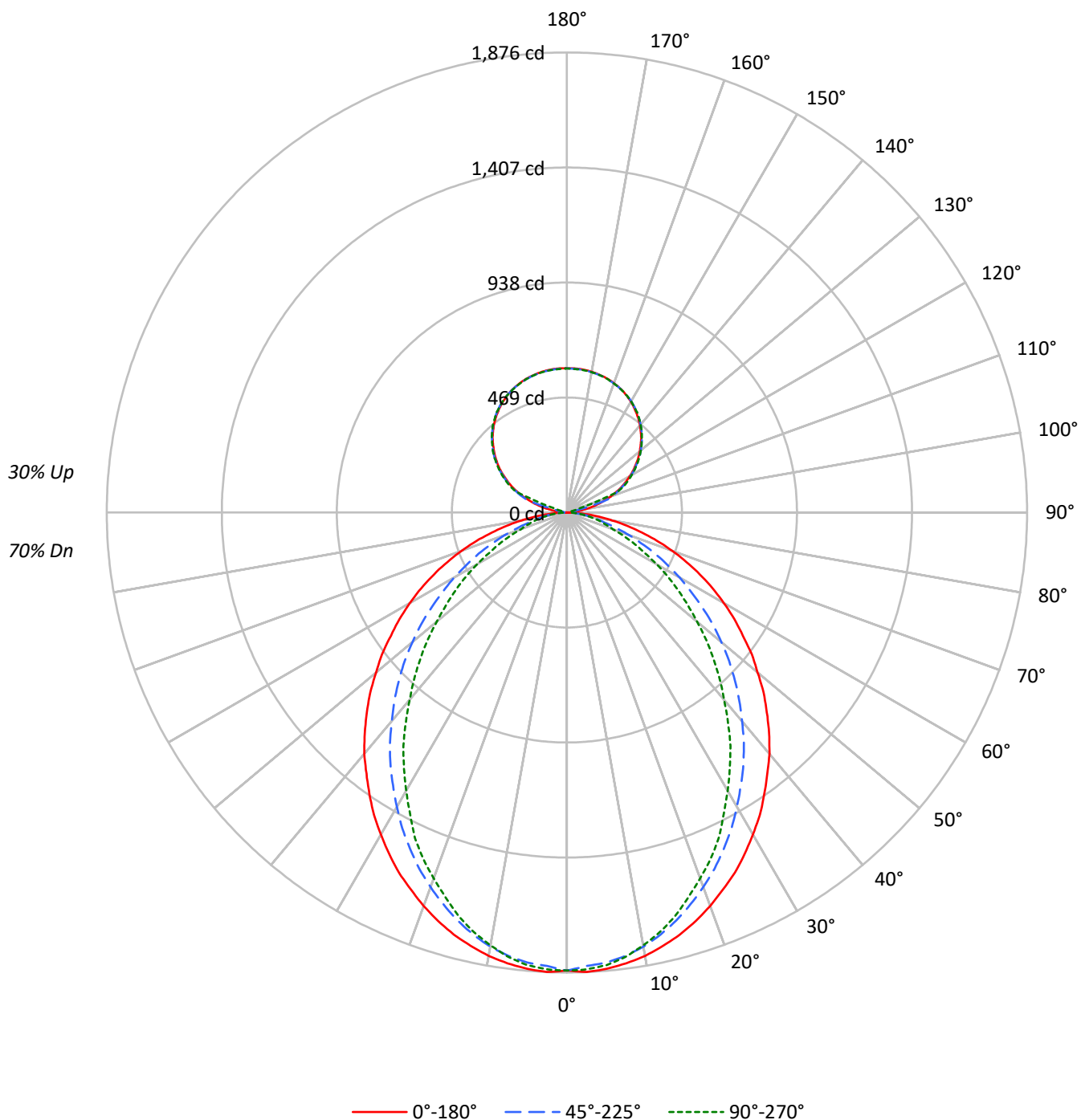
Lumens per Lamp: N/A
Luminaire Lumens: 6012.9 lumens
Efficiency: N/A
Efficacy: 80.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 74.5
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	50	30	10
RCR																				
0	112	112	112	112	106	106	106	106	95	95	95	84	84	84	75	75	75	75	75	75
1	103	99	95	91	97	93	90	87	84	81	79	75	73	71	67	65	64	64	64	60
2	94	87	80	75	89	82	77	72	74	70	66	66	63	60	59	57	55	55	55	51
3	86	77	69	63	81	73	66	61	66	60	56	59	55	51	53	50	47	47	47	44
4	79	68	60	54	75	65	58	52	59	53	48	53	48	45	48	44	41	41	41	38
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36	36	36	33
6	67	55	47	41	63	53	45	40	48	42	37	43	38	34	39	35	32	32	32	29
7	62	50	42	36	59	48	40	35	44	37	33	40	34	31	36	32	28	28	28	26
8	58	46	38	32	55	44	36	31	40	34	29	36	31	28	33	29	26	26	26	24
9	54	42	34	29	51	40	33	28	37	31	27	34	29	25	31	26	23	23	23	21
10	51	39	31	26	48	37	30	26	34	28	24	31	26	23	29	24	21	21	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20106	20106	20106
5°	20139	19395	19343
10°	19980	18665	18298
15°	19721	17764	17154
20°	19381	16784	15875
25°	19030	15765	14664
30°	18581	14682	13231
35°	18116	13618	11928
40°	17681	12462	10487
45°	17122	11332	9191
50°	16505	10124	7851
55°	15865	8832	6623
60°	15255	7507	5376
65°	14465	6147	4195
70°	13473	4649	2999
75°	12043	3148	2376
80°	10282	2187	1667
85°	7713	1181	873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 17122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.6	2.9
10°-20°	488.5	8.1
20°-30°	703.3	11.7
30°-40°	792.1	13.2
40°-50°	757.6	12.6
50°-60°	620.2	10.3
60°-70°	418.1	7.0
70°-80°	209.7	3.5
80°-90°	56.0	0.9
90°-100°	20.7	0.3
100°-110°	100.2	1.7
110°-120°	245.6	4.1
120°-130°	311.7	5.2
130°-140°	333.0	5.5
140°-150°	311.4	5.2
150°-160°	251.2	4.2
160°-170°	162.1	2.7
170°-180°	55.9	0.9
0°-30°	1367.4	22.7
0°-40°	2159.5	35.9
0°-60°	3537.3	58.8
0°-90°	4221.2	70.2
90°-120°	366.5	6.1
90°-150°	1322.6	22.0
90°-180°	1792.0	29.8
0°-180°	6012.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1868	1868	1868	1868	1868	
5°	1868	1860	1842	1856	1853	177
15°	1782	1765	1722	1715	1704	502
25°	1621	1583	1513	1482	1465	746
35°	1403	1348	1254	1189	1162	878
45°	1153	1085	968	882	845	890
55°	876	801	673	585	554	785
65°	598	515	397	323	306	592
75°	317	244	161	145	142	337
85°	80	47	42	39	39	88
90°	0	5	10	12	13	6
95°	27	9	14	17	17	32
105°	130	135	96	18	19	138
115°	244	247	251	255	257	241
125°	344	348	349	350	351	307
135°	428	431	433	434	433	330
145°	494	497	498	499	499	309
155°	544	544	544	546	544	251
165°	574	573	572	576	573	162
175°	588	586	586	589	586	56
180°	588	588	588	588	588	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1867.9	1867.9	1867.9	1867.9	1867.9
2.5°	1875.5	1869.5	1851.3	1867.9	1864.9
5°	1867.9	1860.4	1842.2	1855.8	1852.8
7.5°	1854.3	1846.7	1824.0	1833.1	1828.5
10°	1836.1	1825.5	1798.2	1799.8	1792.2
12.5°	1810.4	1798.2	1763.4	1761.9	1752.8
15°	1781.6	1764.9	1722.5	1714.9	1704.3
17.5°	1746.7	1728.6	1675.5	1660.4	1645.2
20°	1707.4	1683.1	1625.5	1605.8	1587.7
22.5°	1663.4	1634.6	1572.5	1546.8	1530.1
25°	1621.0	1583.1	1513.4	1481.6	1465.0
27.5°	1569.5	1528.6	1452.8	1410.4	1384.7
30°	1516.5	1471.0	1386.2	1334.7	1310.4
32.5°	1463.4	1410.4	1319.5	1262.0	1236.2
35°	1402.8	1348.3	1254.4	1189.2	1162.0
37.5°	1342.2	1283.2	1184.7	1112.0	1078.6
40°	1284.7	1218.0	1110.5	1031.7	996.8
42.5°	1219.5	1152.9	1040.8	952.9	922.6
45°	1152.9	1084.7	968.1	881.7	845.3
47.5°	1087.7	1012.0	896.9	802.9	771.1
50°	1015.0	943.8	821.1	727.2	692.3
52.5°	949.9	871.1	749.9	651.4	621.1
55°	875.6	801.4	672.6	584.8	554.5
57.5°	809.0	728.7	598.4	515.1	489.3
60°	739.3	656.0	530.2	448.4	422.7
62.5°	669.6	586.3	460.5	384.8	357.5
65°	598.4	515.1	396.9	322.7	306.0
67.5°	527.2	442.4	327.2	271.2	253.0
70°	457.5	375.7	269.7	216.6	200.0
72.5°	387.8	307.5	213.6	172.7	168.2
75°	316.6	243.9	160.6	145.4	142.4
77.5°	251.5	184.8	125.7	116.7	113.6
80°	189.4	127.3	95.4	90.9	87.9
82.5°	130.3	78.8	68.2	63.6	63.6
85°	80.3	47.0	42.4	39.4	39.4
87.5°	36.4	19.7	19.7	18.2	16.7
90°	0.4	4.8	10.5	12.2	13.1
92.5°	10.0	7.4	11.4	14.4	14.8
95°	26.6	8.7	13.5	16.6	16.6
97.5°	48.5	36.2	14.0	17.5	17.9
100°	73.8	82.5	14.4	17.9	18.3
102.5°	102.6	108.3	32.3	17.9	18.8
105°	130.1	134.9	95.6	18.3	19.2
107.5°	159.4	163.3	169.9	102.6	45.4
110°	188.6	192.1	196.9	182.5	120.1



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	216.6	219.6	224.4	228.4	227.5
115°	244.1	246.7	250.6	255.0	256.8
117.5°	271.2	274.2	276.4	279.9	280.3
120°	296.1	300.0	301.3	304.8	304.8
122.5°	321.4	324.4	326.2	328.4	328.8
125°	344.1	347.6	349.3	350.2	351.1
127.5°	366.8	370.3	372.5	373.8	372.9
130°	387.8	391.3	393.0	394.7	393.9
132.5°	407.8	411.3	412.7	414.4	413.1
135°	428.4	431.0	432.7	434.0	432.7
137.5°	445.8	449.3	450.2	452.4	451.5
140°	463.3	465.9	467.2	469.0	468.1
142.5°	479.5	482.1	483.4	484.7	483.4
145°	494.3	497.4	498.2	499.1	499.1
147.5°	508.7	510.9	511.8	512.6	510.5
150°	521.8	523.1	524.0	524.9	523.6
152.5°	533.6	534.0	534.5	536.2	534.0
155°	544.5	543.7	544.1	546.3	543.7
157.5°	553.3	553.3	552.8	555.4	551.9
160°	561.1	560.7	560.2	562.9	559.8
162.5°	568.5	567.2	566.8	569.9	567.2
165°	574.2	572.9	572.5	576.0	572.9
167.5°	579.0	577.3	577.3	580.8	577.3
170°	583.0	581.2	581.2	584.7	581.2
172.5°	585.6	583.4	583.8	587.3	583.4
175°	587.8	585.6	586.0	589.1	585.6
177.5°	588.6	586.4	586.9	590.4	586.0
180°	587.8	587.8	587.8	587.8	587.8

(END OF REPORT)