

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: P1032059

Luminaire Tested: S123RDIW-B1000D460UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1032059
REPORT IS A COMBINATION OF REPORTS P993893 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDIW-B1000D460UB50-4F0-XX-W2A-F1
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

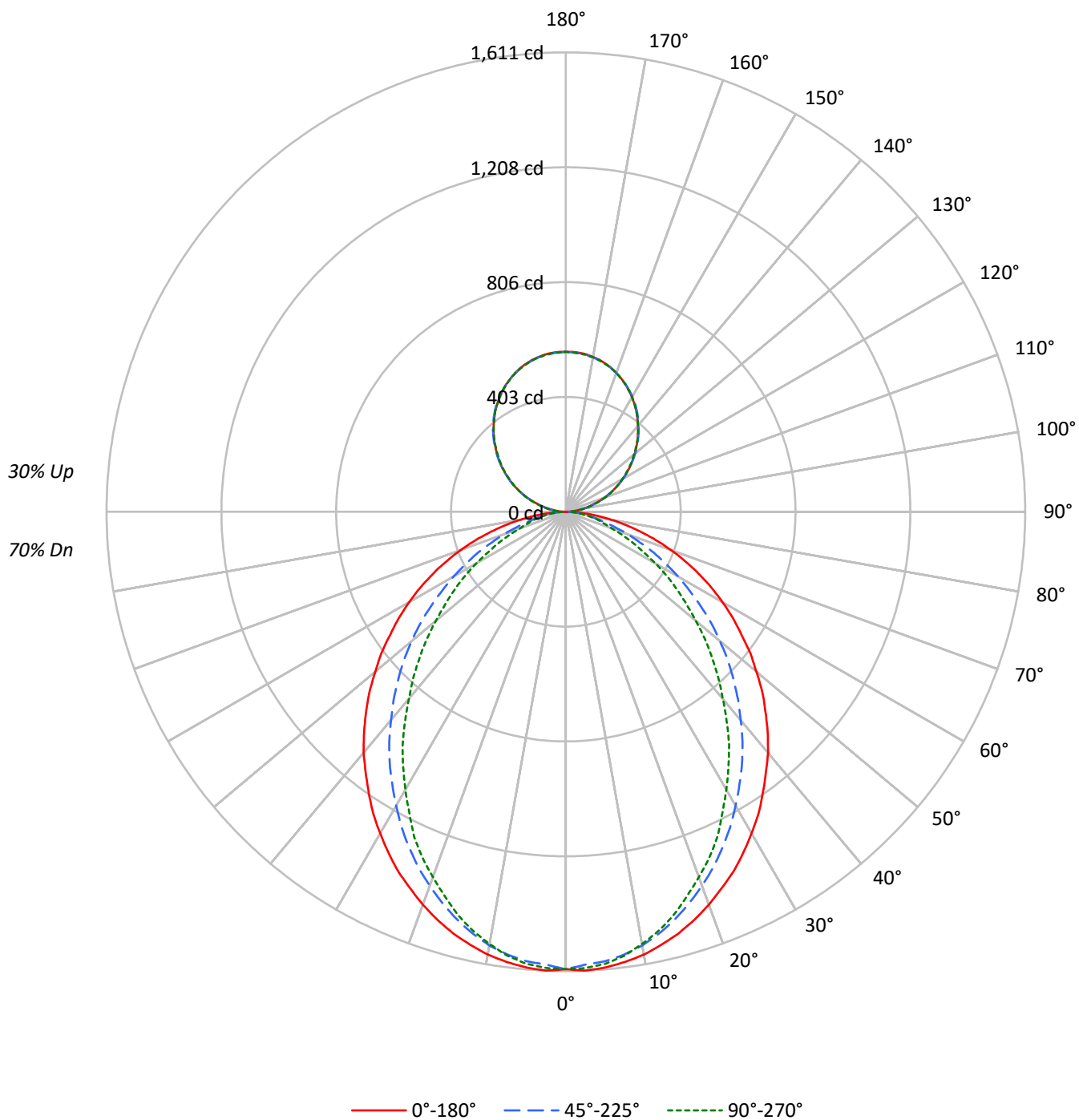
Lumens per Lamp: N/A
Luminaire Lumens: 5179.0 lumens
Efficiency: N/A
Efficacy: 86.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 60
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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74
1	103	98	95	91	97	93	90	87	84	81	79	75	73	71	67	65	64
2	94	87	80	75	89	82	77	72	74	70	66	66	63	60	59	57	55
3	86	77	69	63	81	73	66	61	66	60	56	59	55	51	53	50	47
4	79	68	60	54	74	65	58	52	59	53	48	53	48	44	48	44	41
5	73	61	53	47	69	58	51	45	53	47	42	48	43	39	43	39	36
6	67	55	47	41	63	52	45	40	48	42	37	43	38	34	39	35	32
7	62	50	42	36	59	48	40	35	44	37	33	40	34	31	36	32	28
8	58	46	38	32	55	44	36	31	40	34	29	36	31	27	33	29	26
9	54	42	34	29	51	40	33	28	37	31	26	34	28	25	31	26	23
10	51	38	31	26	48	37	30	26	34	28	24	31	26	23	28	24	21

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17266	17266	17266
5°	17295	16656	16611
10°	17159	16030	15714
15°	16936	15255	14731
20°	16643	14414	13633
25°	16343	13539	12593
30°	15956	12608	11363
35°	15558	11694	10244
40°	15183	10701	9006
45°	14704	9730	7894
50°	14175	8694	6743
55°	13626	7584	5687
60°	13101	6446	4616
65°	12423	5280	3603
70°	11570	3992	2574
75°	10343	2703	2040
80°	8827	1880	1432
85°	6628	1014	749

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14704 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.8	2.9
10°-20°	419.5	8.1
20°-30°	604.0	11.7
30°-40°	680.2	13.1
40°-50°	650.6	12.6
50°-60°	532.6	10.3
60°-70°	359.1	6.9
70°-80°	180.1	3.5
80°-90°	48.3	0.9
90°-100°	36.1	0.7
100°-110°	109.3	2.1
110°-120°	186.0	3.6
120°-130°	244.7	4.7
130°-140°	275.0	5.3
140°-150°	270.4	5.2
150°-160°	227.7	4.4
160°-170°	151.6	2.9
170°-180°	53.1	1.0
0°-30°	1174.3	22.7
0°-40°	1854.5	35.8
0°-60°	3037.7	58.7
0°-90°	3625.2	70.0
90°-120°	331.4	6.4
90°-150°	1121.5	21.7
90°-180°	1554.0	30.0
0°-180°	5179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1604	1604	1604	1604	1604	
5°	1604	1598	1582	1594	1591	152
15°	1530	1516	1479	1473	1464	431
25°	1392	1360	1300	1272	1258	640
35°	1205	1158	1077	1021	998	754
45°	990	932	831	757	726	764
55°	752	688	578	502	476	674
65°	514	442	341	277	263	509
75°	272	210	138	125	122	290
85°	69	40	36	34	34	76
90°	0	5	11	12	13	6
95°	26	29	33	34	34	29
105°	99	100	104	104	105	106
115°	187	188	188	188	188	185
125°	274	275	274	273	271	244
135°	356	358	358	356	355	274
145°	431	432	434	433	431	269
155°	494	494	494	496	493	227
165°	538	536	536	539	536	152
175°	560	558	558	560	557	53
180°	561	561	561	561	561	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1604.1	1604.1	1604.1	1604.1	1604.1
2.5°	1610.6	1605.4	1589.8	1604.1	1601.5
5°	1604.1	1597.6	1582.0	1593.7	1591.1
7.5°	1592.4	1585.9	1566.4	1574.2	1570.3
10°	1576.8	1567.7	1544.3	1545.6	1539.1
12.5°	1554.7	1544.3	1514.4	1513.1	1505.2
15°	1530.0	1515.7	1479.2	1472.7	1463.6
17.5°	1500.0	1484.4	1438.9	1425.9	1412.9
20°	1466.2	1445.4	1396.0	1379.1	1363.4
22.5°	1428.5	1403.8	1350.4	1328.3	1314.0
25°	1392.1	1359.5	1299.7	1272.4	1258.1
27.5°	1347.8	1312.7	1247.7	1211.2	1189.1
30°	1302.3	1263.3	1190.4	1146.2	1125.4
32.5°	1256.8	1211.2	1133.2	1083.7	1061.6
35°	1204.7	1157.9	1077.2	1021.3	997.9
37.5°	1152.7	1101.9	1017.4	954.9	926.3
40°	1103.2	1046.0	953.6	886.0	856.1
42.5°	1047.3	990.1	893.8	818.3	792.3
45°	990.1	931.5	831.3	757.2	726.0
47.5°	934.1	869.1	770.2	689.5	662.2
50°	871.7	810.5	705.1	624.5	594.6
52.5°	815.7	748.1	644.0	559.4	533.4
55°	752.0	688.2	577.6	502.2	476.2
57.5°	694.7	625.8	513.9	442.3	420.2
60°	634.9	563.3	455.3	385.1	363.0
62.5°	575.0	503.5	395.5	330.5	307.0
65°	513.9	442.3	340.9	277.1	262.8
67.5°	452.7	379.9	281.0	232.9	217.3
70°	392.9	322.6	231.6	186.0	171.7
72.5°	333.1	264.1	183.4	148.3	144.4
75°	271.9	209.5	137.9	124.9	122.3
77.5°	216.0	158.7	108.0	100.2	97.6
80°	162.6	109.3	82.0	78.1	75.5
82.5°	111.9	67.7	58.5	54.6	54.6
85°	69.0	40.3	36.4	33.8	33.8
87.5°	31.2	16.9	16.9	15.6	14.3
90°	0.4	4.8	10.6	12.3	13.2
92.5°	13.2	15.9	18.5	19.8	18.9
95°	26.0	29.1	32.6	34.4	34.4
97.5°	42.7	44.9	47.6	49.8	49.3
100°	59.9	62.6	64.8	66.1	67.0
102.5°	79.7	81.1	84.1	85.5	85.0
105°	99.1	100.0	104.0	104.0	104.8
107.5°	122.0	122.5	124.2	125.5	125.1
110°	143.2	144.0	144.9	146.7	145.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	165.2	165.6	165.6	167.8	167.8
115°	187.2	188.5	187.7	188.1	187.7
117.5°	209.7	210.1	209.2	209.2	207.9
120°	230.4	233.0	230.8	230.4	229.5
122.5°	252.0	253.7	252.9	251.5	250.2
125°	274.0	275.3	274.4	272.7	270.9
127.5°	294.3	296.9	296.0	293.4	291.6
130°	314.5	318.1	316.7	315.0	311.9
132.5°	334.8	338.3	337.4	335.2	333.0
135°	355.5	358.1	357.7	355.9	355.1
137.5°	374.4	376.6	378.0	375.8	374.4
140°	394.3	396.5	396.9	396.5	393.4
142.5°	412.3	414.5	415.4	415.0	412.8
145°	431.3	432.1	433.5	433.0	431.3
147.5°	447.6	449.3	450.6	450.6	448.0
150°	464.7	465.6	466.5	466.5	463.9
152.5°	478.8	480.2	480.6	481.5	479.3
155°	493.8	493.8	494.3	496.0	492.9
157.5°	506.6	506.2	506.6	508.4	505.7
160°	518.5	517.6	517.6	519.8	518.0
162.5°	529.1	527.7	528.2	530.4	527.3
165°	537.9	536.5	536.5	539.2	536.1
167.5°	545.4	543.6	544.0	546.7	544.0
170°	551.5	549.8	549.8	552.8	549.8
172.5°	556.4	554.6	554.6	557.3	554.2
175°	559.5	557.7	557.7	560.3	557.3
177.5°	561.2	559.5	559.5	562.1	559.0
180°	560.8	560.8	560.8	560.8	560.8

(END OF REPORT)