

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: P1031376

Luminaire Tested: S123DIW-B1000D460UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031376
REPORT IS A COMBINATION OF REPORTS P990780 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB50-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

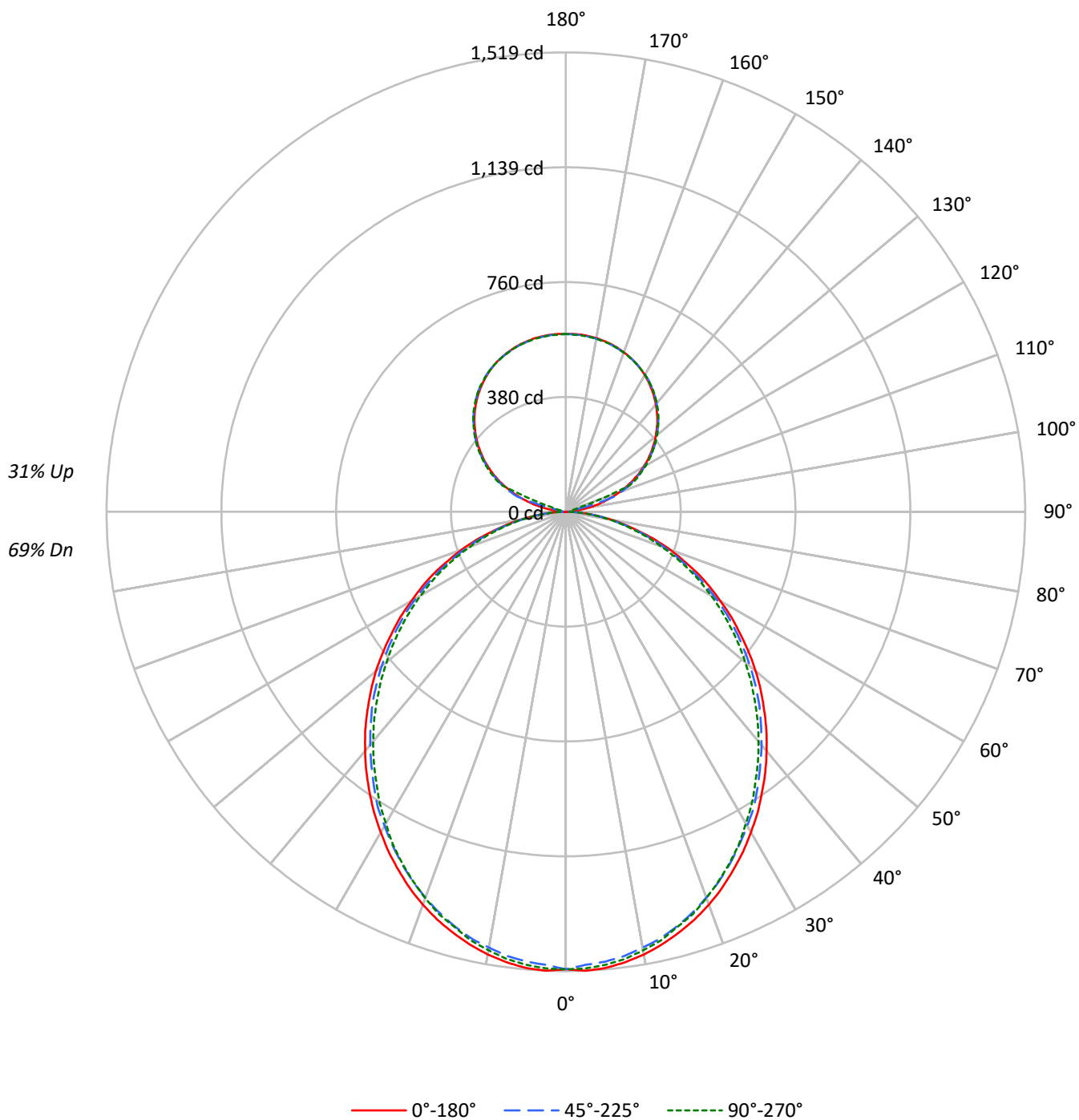
Lumens per Lamp: N/A
Luminaire Lumens: 5730.0 lumens
Efficiency: N/A
Efficacy: 95.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	105	105	105	105	94	94	94	83	83	83	73	73	73
1	102	97	93	90	96	92	89	85	82	80	77	73	71	69	65	63	62
2	93	85	79	73	87	81	75	70	72	68	64	64	61	58	57	54	52
3	85	75	67	61	80	71	64	59	64	58	54	57	52	49	50	47	44
4	77	66	58	52	73	63	55	50	56	50	46	51	46	42	45	41	38
5	71	59	51	44	67	56	49	43	51	44	40	45	40	36	41	37	33
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29
7	61	48	40	34	57	46	38	33	42	35	31	37	32	28	34	29	26
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23
9	53	40	32	27	50	38	31	26	35	29	24	32	26	23	29	24	21
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	27	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16283	16283	16283
5°	16323	15721	15697
10°	16178	15189	15033
15°	15953	14635	14309
20°	15696	14022	13592
25°	15362	13373	12824
30°	14997	12702	12018
35°	14614	12016	11216
40°	14214	11298	10428
45°	13773	10596	9603
50°	13326	9815	8776
55°	12751	9001	7939
60°	12158	8103	7047
65°	11603	7132	6116
70°	10802	6054	5032
75°	9647	4793	3906
80°	8333	3369	2763
85°	6493	1810	1383

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13773 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.6	2.5
10°-20°	402.7	7.0
20°-30°	594.7	10.4
30°-40°	694.6	12.1
40°-50°	698.3	12.2
50°-60°	613.4	10.7
60°-70°	456.8	8.0
70°-80°	260.0	4.5
80°-90°	75.1	1.3
90°-100°	20.7	0.4
100°-110°	100.2	1.7
110°-120°	245.6	4.3
120°-130°	311.7	5.4
130°-140°	333.0	5.8
140°-150°	311.4	5.4
150°-160°	251.2	4.4
160°-170°	162.1	2.8
170°-180°	55.9	1.0
0°-30°	1140.0	19.9
0°-40°	1834.6	32.0
0°-60°	3146.3	54.9
0°-90°	3938.2	68.7
90°-120°	366.5	6.4
90°-150°	1322.6	23.1
90°-180°	1792.0	31.3
0°-180°	5730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1513	1513	1513	1513	1513	
5°	1514	1508	1493	1506	1504	144
15°	1441	1436	1419	1430	1422	406
25°	1308	1301	1284	1285	1281	603
35°	1132	1124	1107	1099	1093	708
45°	927	922	905	890	883	716
55°	704	702	686	671	665	630
65°	480	474	460	450	446	474
75°	254	248	244	238	234	271
85°	68	65	65	62	62	73
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°	1512.7	1512.7	1512.7	1512.7	1512.7
2.5°	1519.2	1514.0	1499.7	1512.7	1511.4
5°	1514.0	1507.5	1493.2	1506.2	1503.6
7.5°	1502.3	1495.8	1481.5	1493.2	1491.9
10°	1486.7	1480.2	1463.3	1475.0	1472.4
12.5°	1465.9	1460.7	1445.1	1452.9	1451.6
15°	1441.2	1436.0	1419.1	1429.5	1421.7
17.5°	1413.9	1407.4	1390.5	1398.3	1395.7
20°	1382.7	1374.9	1358.0	1363.2	1359.3
22.5°	1347.6	1339.7	1322.8	1326.7	1321.5
25°	1308.5	1300.7	1283.8	1285.1	1281.2
27.5°	1268.2	1260.4	1242.2	1243.5	1239.6
30°	1224.0	1217.5	1199.3	1199.3	1190.2
32.5°	1179.8	1170.7	1157.6	1148.5	1144.6
35°	1131.6	1123.8	1106.9	1099.1	1092.6
37.5°	1083.5	1073.1	1056.2	1047.1	1043.2
40°	1032.8	1025.0	1006.8	996.4	991.2
42.5°	982.0	972.9	954.7	944.3	939.1
45°	927.4	922.2	905.3	889.7	883.2
47.5°	874.1	866.3	850.7	835.1	829.9
50°	819.5	813.0	796.0	781.7	773.9
52.5°	762.2	758.3	740.1	728.4	720.6
55°	703.7	702.4	685.5	671.2	664.7
57.5°	649.1	643.9	630.9	617.8	610.0
60°	589.2	587.9	572.3	560.6	554.1
62.5°	535.9	532.0	516.4	504.7	500.8
65°	480.0	473.5	460.5	450.1	446.1
67.5°	420.1	414.9	404.5	395.4	390.2
70°	366.8	359.0	351.2	342.1	335.6
72.5°	310.9	305.7	296.6	288.8	286.2
75°	253.6	248.4	244.5	238.0	234.1
77.5°	202.9	200.3	195.1	189.9	189.9
80°	153.5	149.6	147.0	145.7	145.7
82.5°	105.4	105.4	105.4	102.8	101.5
85°	67.6	65.0	65.0	62.4	62.4
87.5°	33.8	29.9	28.6	27.3	27.3
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)