

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: P1031352

Luminaire Tested: S123DIW-B1000D460UB27-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031352
REPORT IS A COMBINATION OF REPORTS P990723 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B1000D460UB27-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

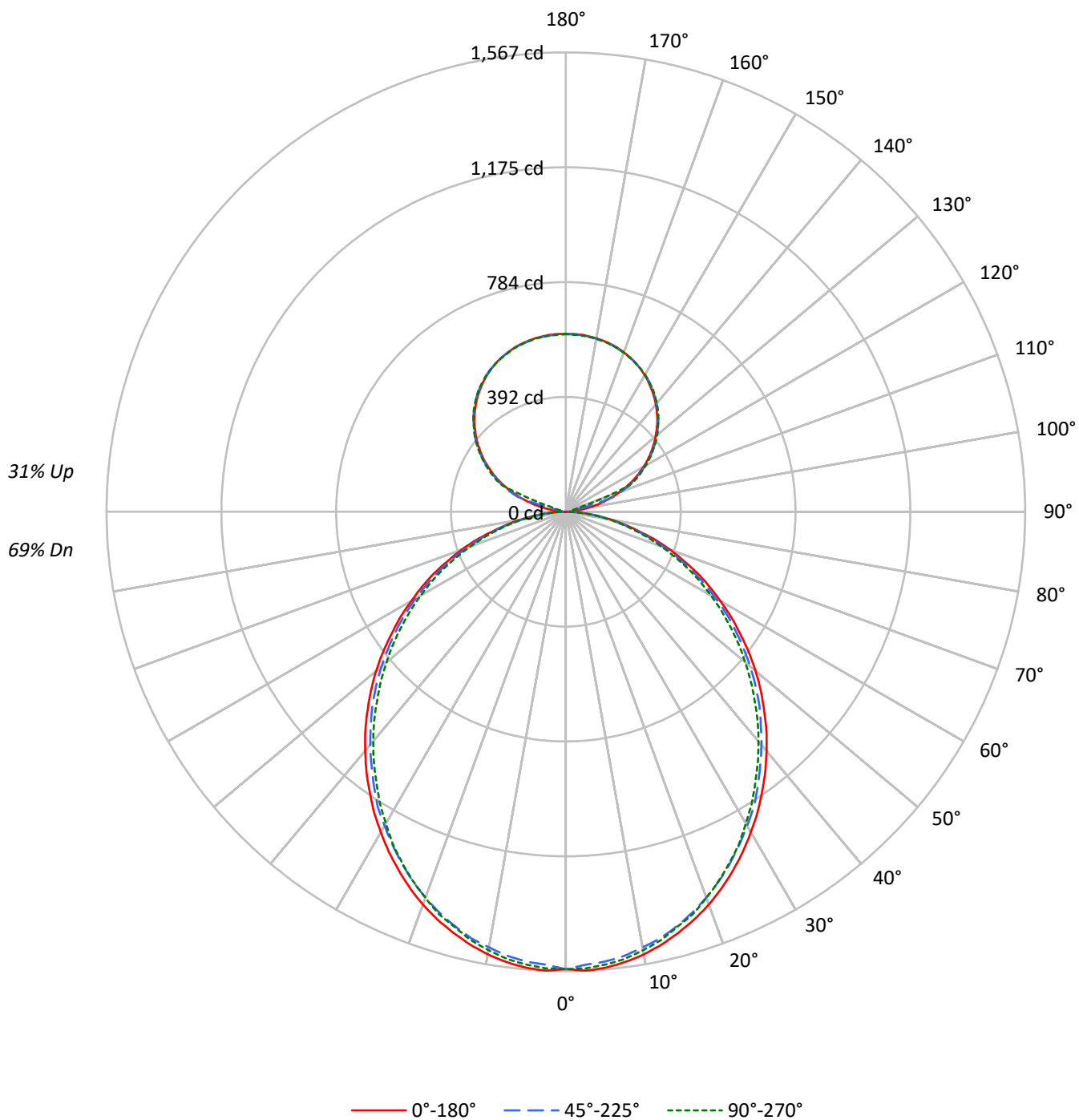
Lumens per Lamp: N/A
Luminaire Lumens: 5909.0 lumens
Efficiency: N/A
Efficacy: 98.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	16792	16792	16792
5°	16833	16212	16188
10°	16684	15663	15503
15°	16451	15092	14756
20°	16186	14460	14016
25°	15842	13791	13225
30°	15465	13098	12392
35°	15071	12392	11566
40°	14657	11650	10753
45°	14204	10928	9903
50°	13742	10122	9050
55°	13149	9282	8186
60°	12537	8356	7267
65°	11966	7354	6308
70°	11140	6244	5189
75°	9951	4944	4027
80°	8594	3475	2849
85°	6705	1869	1427

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14204 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.1	2.5
10°-20°	415.3	7.0
20°-30°	613.3	10.4
30°-40°	716.3	12.1
40°-50°	720.1	12.2
50°-60°	632.6	10.7
60°-70°	471.1	8.0
70°-80°	268.1	4.5
80°-90°	77.5	1.3
90°-100°	21.4	0.4
100°-110°	103.3	1.7
110°-120°	253.2	4.3
120°-130°	321.5	5.4
130°-140°	343.4	5.8
140°-150°	321.1	5.4
150°-160°	259.0	4.4
160°-170°	167.2	2.8
170°-180°	57.6	1.0
0°-30°	1175.6	19.9
0°-40°	1891.9	32.0
0°-60°	3244.6	54.9
0°-90°	4061.2	68.7
90°-120°	378.0	6.4
90°-150°	1364.0	23.1
90°-180°	1848.0	31.3
0°-180°	5909.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1560	1560	1560	1560	1560	
5°	1561	1555	1540	1553	1551	148
15°	1486	1481	1463	1474	1466	419
25°	1349	1341	1324	1325	1321	622
35°	1167	1159	1142	1134	1127	730
45°	956	951	934	918	911	738
55°	726	724	707	692	685	650
65°	495	488	475	464	460	488
75°	262	256	252	246	241	279
85°	70	67	67	64	64	75
90°	0	5	11	13	14	6
95°	28	9	14	17	17	33
105°	134	139	99	19	20	142
115°	252	254	258	263	265	249
125°	355	358	360	361	362	317
135°	442	444	446	448	446	340
145°	510	513	514	515	515	319
155°	562	561	561	563	561	259
165°	592	591	590	594	591	167
175°	606	604	604	608	604	58
180°	606	606	606	606	606	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1560.0	1560.0	1560.0	1560.0	1560.0
2.5°	1566.7	1561.3	1546.6	1560.0	1558.7
5°	1561.3	1554.6	1539.9	1553.3	1550.6
7.5°	1549.3	1542.6	1527.8	1539.9	1538.5
10°	1533.2	1526.5	1509.0	1521.1	1518.4
12.5°	1511.7	1506.3	1490.3	1498.3	1497.0
15°	1486.2	1480.9	1463.4	1474.2	1466.1
17.5°	1458.1	1451.4	1433.9	1442.0	1439.3
20°	1425.9	1417.8	1400.4	1405.7	1401.7
22.5°	1389.7	1381.6	1364.2	1368.2	1362.8
25°	1349.4	1341.4	1323.9	1325.3	1321.2
27.5°	1307.8	1299.8	1281.0	1282.3	1278.3
30°	1262.2	1255.5	1236.7	1236.7	1227.3
32.5°	1216.6	1207.2	1193.8	1184.4	1180.4
35°	1167.0	1158.9	1141.5	1133.5	1126.7
37.5°	1117.4	1106.6	1089.2	1079.8	1075.8
40°	1065.0	1057.0	1038.2	1027.5	1022.1
42.5°	1012.7	1003.3	984.6	973.8	968.5
45°	956.4	951.0	933.6	917.5	910.8
47.5°	901.4	893.3	877.3	861.2	855.8
50°	845.1	838.4	820.9	806.2	798.1
52.5°	786.0	782.0	763.2	751.2	743.1
55°	725.7	724.3	706.9	692.1	685.4
57.5°	669.3	664.0	650.6	637.1	629.1
60°	607.6	606.3	590.2	578.1	571.4
62.5°	552.6	548.6	532.5	520.4	516.4
65°	495.0	488.3	474.8	464.1	460.1
67.5°	433.3	427.9	417.2	407.8	402.4
70°	378.3	370.2	362.2	352.8	346.1
72.5°	320.6	315.2	305.8	297.8	295.1
75°	261.6	256.2	252.2	245.5	241.4
77.5°	209.3	206.6	201.2	195.8	195.8
80°	158.3	154.3	151.6	150.2	150.2
82.5°	108.7	108.7	108.7	106.0	104.6
85°	69.8	67.1	67.1	64.4	64.4
87.5°	34.9	30.9	29.5	28.2	28.2
90°	0.5	5.0	10.8	12.6	13.5
92.5°	10.4	7.7	11.7	14.9	15.3
95°	27.5	9.0	14.0	17.1	17.1
97.5°	50.0	37.4	14.4	18.0	18.5
100°	76.1	85.1	14.9	18.5	18.9
102.5°	105.8	111.7	33.3	18.5	19.4
105°	134.2	139.1	98.6	18.9	19.8
107.5°	164.4	168.4	175.2	105.8	46.8
110°	194.5	198.1	203.1	188.2	123.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	226.5	231.5	235.5	234.6
115°	251.7	254.4	258.5	263.0	264.8
117.5°	279.6	282.8	285.0	288.6	289.1
120°	305.3	309.4	310.7	314.3	314.3
122.5°	331.4	334.6	336.4	338.6	339.1
125°	354.8	358.4	360.2	361.1	362.0
127.5°	378.3	381.9	384.1	385.5	384.6
130°	399.9	403.5	405.3	407.1	406.2
132.5°	420.6	424.2	425.5	427.3	426.0
135°	441.8	444.5	446.3	447.6	446.3
137.5°	459.8	463.4	464.3	466.5	465.6
140°	477.8	480.5	481.8	483.6	482.7
142.5°	494.4	497.1	498.5	499.8	498.5
145°	509.7	512.9	513.8	514.7	514.7
147.5°	524.6	526.9	527.8	528.7	526.4
150°	538.1	539.5	540.4	541.3	539.9
152.5°	550.3	550.7	551.2	553.0	550.7
155°	561.5	560.6	561.1	563.3	560.6
157.5°	570.5	570.5	570.1	572.8	569.2
160°	578.6	578.2	577.7	580.4	577.3
162.5°	586.3	584.9	584.5	587.7	584.9
165°	592.2	590.8	590.4	594.0	590.8
167.5°	597.1	595.3	595.3	598.9	595.3
170°	601.2	599.4	599.4	603.0	599.4
172.5°	603.9	601.6	602.1	605.7	601.6
175°	606.1	603.9	604.3	607.5	603.9
177.5°	607.0	604.8	605.2	608.8	604.3
180°	606.1	606.1	606.1	606.1	606.1

(END OF REPORT)