

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: P1031562

Luminaire Tested: S123DIW-B340D1030UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1031562
REPORT IS A COMBINATION OF REPORTS P991215 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123DIW-B340D1030UB30-4F0-XX-W2A-F
Description: Define 3 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

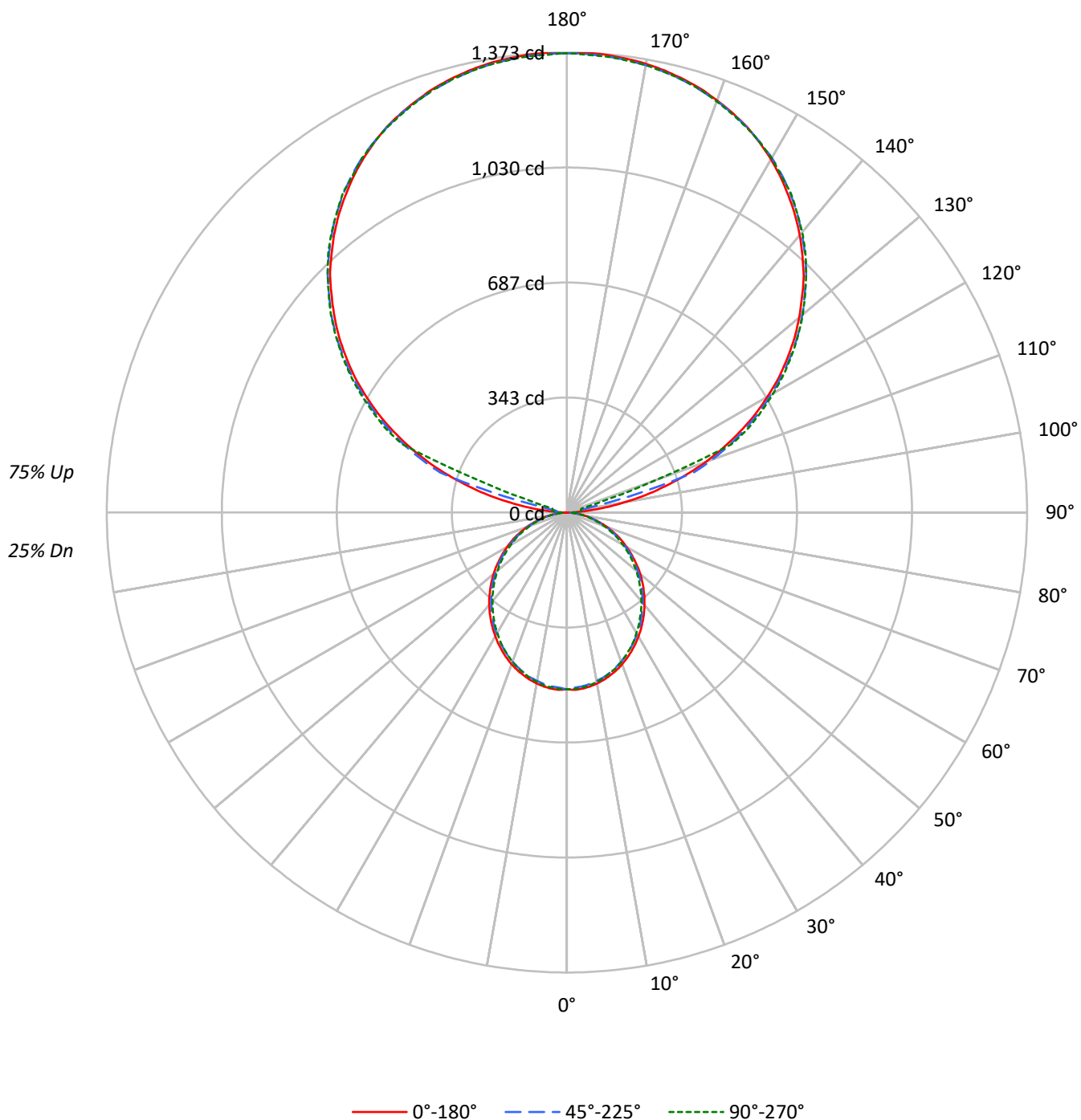
Lumens per Lamp: N/A
Luminaire Lumens: 5556.0 lumens
Efficiency: N/A
Efficacy: 124.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 44.5
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
RCR																	
0	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11
8	50	38	31	26	45	34	28	24	27	22	19	20	17	15	14	12	10
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5679	5679	5679
5°	5693	5483	5475
10°	5642	5297	5243
15°	5564	5104	4990
20°	5474	4890	4740
25°	5357	4664	4472
30°	5230	4429	4191
35°	5096	4190	3911
40°	4957	3940	3637
45°	4803	3695	3349
50°	4647	3423	3061
55°	4446	3140	2769
60°	4240	2826	2457
65°	4047	2487	2133
70°	3767	2112	1754
75°	3366	1672	1363
80°	2904	1176	963
85°	2267	632	483

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4803 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.7	0.9
10°-20°	140.4	2.5
20°-30°	207.4	3.7
30°-40°	242.2	4.4
40°-50°	243.5	4.4
50°-60°	213.9	3.9
60°-70°	159.3	2.9
70°-80°	90.7	1.6
80°-90°	28.5	0.5
90°-100°	48.4	0.9
100°-110°	233.8	4.2
110°-120°	572.9	10.3
120°-130°	727.3	13.1
130°-140°	776.9	14.0
140°-150°	726.5	13.1
150°-160°	586.0	10.5
160°-170°	378.2	6.8
170°-180°	130.3	2.3
0°-30°	397.6	7.2
0°-40°	639.8	11.5
0°-60°	1097.2	19.7
0°-90°	1375.7	24.8
90°-120°	855.0	15.4
90°-150°	3085.8	55.5
90°-180°	4180.0	75.2
0°-180°	5556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	528	528	528	528	528	
5°	528	526	521	525	524	50
15°	503	501	495	498	496	142
25°	456	454	448	448	447	210
35°	395	392	386	383	381	247
45°	323	322	316	310	308	250
55°	245	245	239	234	232	220
65°	167	165	161	157	156	165
75°	88	87	85	83	82	94
85°	24	23	23	22	22	25
90°	1	11	24	28	31	5
95°	62	20	32	39	39	74
105°	304	315	223	43	45	322
115°	570	576	585	595	599	562
125°	803	811	815	817	819	717
135°	999	1006	1010	1013	1010	769
145°	1153	1160	1162	1164	1164	722
155°	1270	1268	1269	1274	1268	585
165°	1340	1337	1336	1344	1337	379
175°	1371	1366	1367	1374	1366	130
180°	1371	1371	1371	1371	1371	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	527.6	527.6	527.6	527.6	527.6
2.5°	529.8	528.0	523.0	527.6	527.1
5°	528.0	525.7	520.8	525.3	524.4
7.5°	523.9	521.7	516.7	520.8	520.3
10°	518.5	516.2	510.3	514.4	513.5
12.5°	511.2	509.4	504.0	506.7	506.2
15°	502.6	500.8	494.9	498.5	495.8
17.5°	493.1	490.8	484.9	487.6	486.7
20°	482.2	479.5	473.6	475.4	474.0
22.5°	469.9	467.2	461.3	462.7	460.9
25°	456.3	453.6	447.7	448.2	446.8
27.5°	442.3	439.6	433.2	433.7	432.3
30°	426.9	424.6	418.2	418.2	415.1
32.5°	411.4	408.3	403.7	400.5	399.2
35°	394.6	391.9	386.0	383.3	381.0
37.5°	377.9	374.2	368.3	365.2	363.8
40°	360.2	357.5	351.1	347.5	345.7
42.5°	342.5	339.3	333.0	329.3	327.5
45°	323.4	321.6	315.7	310.3	308.0
47.5°	304.8	302.1	296.7	291.2	289.4
50°	285.8	283.5	277.6	272.6	269.9
52.5°	265.8	264.5	258.1	254.0	251.3
55°	245.4	245.0	239.1	234.1	231.8
57.5°	226.4	224.5	220.0	215.5	212.7
60°	205.5	205.0	199.6	195.5	193.2
62.5°	186.9	185.5	180.1	176.0	174.6
65°	167.4	165.1	160.6	157.0	155.6
67.5°	146.5	144.7	141.1	137.9	136.1
70°	127.9	125.2	122.5	119.3	117.0
72.5°	108.4	106.6	103.4	100.7	99.8
75°	88.5	86.6	85.3	83.0	81.7
77.5°	70.8	69.9	68.0	66.2	66.2
80°	53.5	52.2	51.3	50.8	50.8
82.5°	36.7	36.7	36.7	35.8	35.4
85°	23.6	22.7	22.7	21.8	21.8
87.5°	11.8	10.4	10.0	9.5	9.5
90°	1.0	11.2	24.4	28.5	30.6
92.5°	23.4	17.3	26.5	33.6	34.6
95°	62.1	20.4	31.6	38.7	38.7
97.5°	113.1	84.6	32.6	40.7	41.8
100°	172.2	192.5	33.6	41.8	42.8
102.5°	239.4	252.6	75.4	41.8	43.8
105°	303.6	314.8	223.1	42.8	44.8
107.5°	371.8	381.0	396.3	239.4	105.9
110°	440.1	448.2	459.4	425.8	280.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.3	512.4	523.6	532.8	530.8
115°	569.5	575.6	584.8	594.9	599.0
117.5°	632.6	639.8	644.9	653.0	654.0
120°	690.7	699.9	702.9	711.1	711.1
122.5°	749.8	756.9	761.0	766.1	767.1
125°	802.8	810.9	815.0	817.0	819.1
127.5°	855.7	863.9	869.0	872.0	870.0
130°	904.6	912.8	916.9	920.9	918.9
132.5°	951.5	959.6	962.7	966.8	963.7
135°	999.4	1005.5	1009.6	1012.6	1009.6
137.5°	1040.1	1048.3	1050.3	1055.4	1053.4
140°	1080.9	1087.0	1090.0	1094.1	1092.1
142.5°	1118.6	1124.7	1127.7	1130.8	1127.7
145°	1153.2	1160.3	1162.4	1164.4	1164.4
147.5°	1186.8	1191.9	1194.0	1196.0	1190.9
150°	1217.4	1220.4	1222.5	1224.5	1221.5
152.5°	1244.9	1245.9	1246.9	1251.0	1245.9
155°	1270.4	1268.3	1269.3	1274.4	1268.3
157.5°	1290.7	1290.7	1289.7	1295.8	1287.7
160°	1309.1	1308.1	1307.0	1313.1	1306.0
162.5°	1326.4	1323.3	1322.3	1329.4	1323.3
165°	1339.6	1336.6	1335.6	1343.7	1336.6
167.5°	1350.8	1346.8	1346.8	1354.9	1346.8
170°	1360.0	1355.9	1355.9	1364.1	1355.9
172.5°	1366.1	1361.0	1362.0	1370.2	1361.0
175°	1371.2	1366.1	1367.1	1374.3	1366.1
177.5°	1373.3	1368.2	1369.2	1377.3	1367.1
180°	1371.2	1371.2	1371.2	1371.2	1371.2

(END OF REPORT)