

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: P1033393

Luminaire Tested: S124DIW-B350D1050UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033393
REPORT IS A COMBINATION OF REPORTS P997315 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B350D1050UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

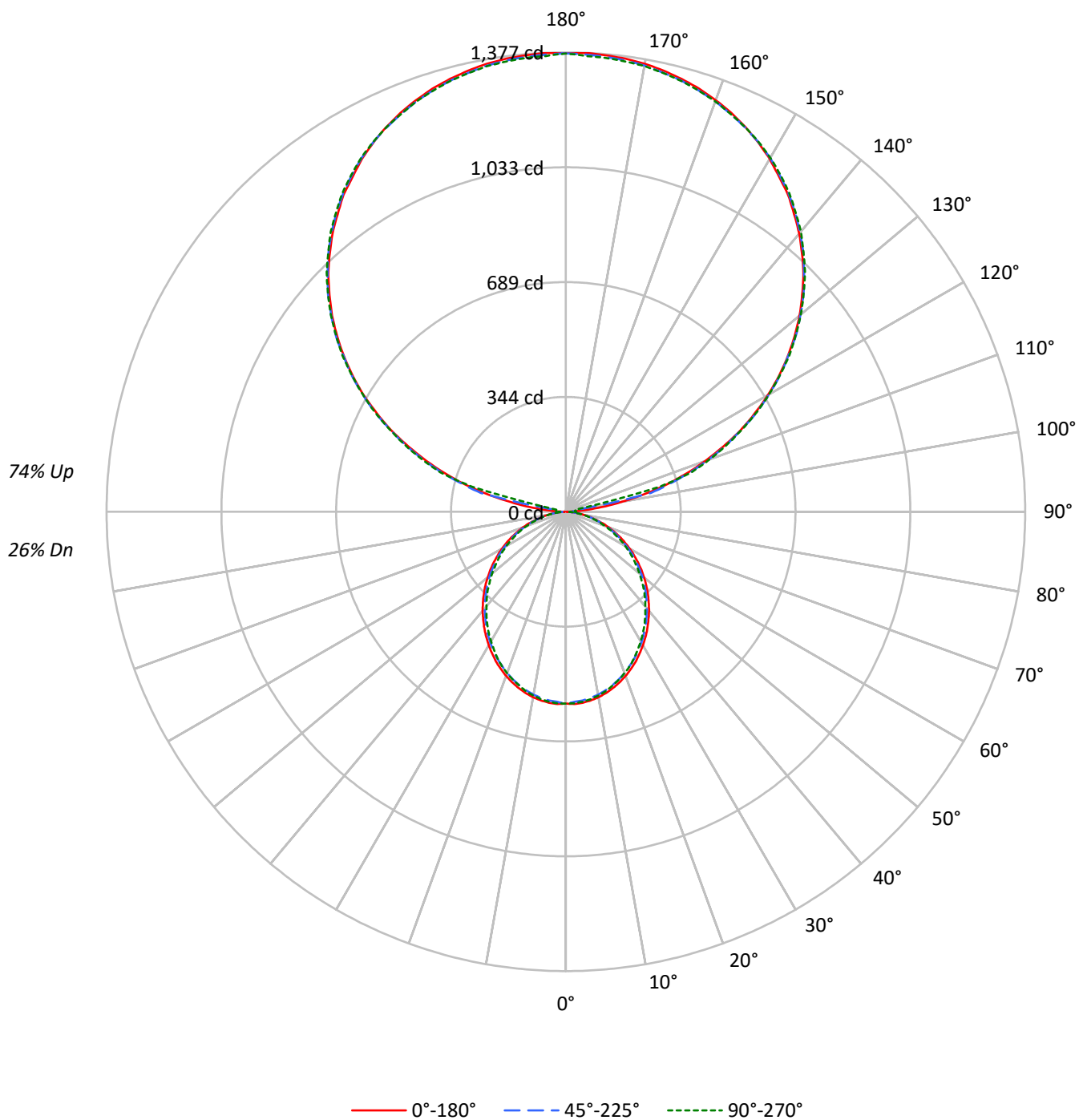
Lumens per Lamp: N/A
Luminaire Lumens: 5730.0 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	70	70	70	51	51	51	34	34	34
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29
2	84	77	71	66	75	69	64	60	53	50	47	39	37	35	26	25	24
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20
4	70	60	52	46	62	53	47	42	42	37	34	31	28	25	21	19	18
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12
8	50	39	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.9
10°-20°	152.7	2.7
20°-30°	224.7	3.9
30°-40°	261.2	4.6
40°-50°	261.2	4.6
50°-60°	228.5	4.0
60°-70°	169.6	3.0
70°-80°	96.2	1.7
80°-90°	30.4	0.5
90°-100°	45.6	0.8
100°-110°	300.3	5.2
110°-120°	573.5	10.0
120°-130°	728.0	12.7
130°-140°	778.8	13.6
140°-150°	728.3	12.7
150°-160°	587.3	10.2
160°-170°	378.8	6.6
170°-180°	130.5	2.3
0°-30°	431.6	7.5
0°-40°	692.9	12.1
0°-60°	1182.6	20.6
0°-90°	1478.8	25.8
90°-120°	919.4	16.0
90°-150°	3154.6	55.1
90°-180°	4251.0	74.2
0°-180°	5730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	3	14	23	29	31	5
95°	56	22	23	29	30	70
105°	309	316	321	330	293	324
115°	578	581	580	582	582	568
125°	812	816	814	817	818	725
135°	1007	1006	1010	1012	1014	776
145°	1161	1164	1164	1165	1167	726
155°	1273	1274	1271	1275	1272	587
165°	1343	1338	1338	1346	1337	380
175°	1374	1368	1369	1378	1366	131
180°	1374	1374	1374	1374	1374	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	3.1	14.4	22.6	28.8	30.8
92.5°	15.4	13.4	21.6	27.7	27.7
95°	56.5	21.6	22.6	28.8	29.8
97.5°	107.9	130.5	22.6	27.7	28.8
100°	168.5	187.0	45.2	27.7	28.8
102.5°	236.3	248.7	261.0	29.8	29.8
105°	309.3	315.5	320.6	329.8	292.9
107.5°	376.1	379.2	386.4	391.5	395.6
110°	443.9	447.0	453.2	455.2	458.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	509.7	515.8	517.9	516.9	521.0
115°	577.5	580.6	579.5	581.6	581.6
117.5°	638.1	642.2	645.3	644.3	644.3
120°	699.8	703.9	702.8	704.9	702.8
122.5°	757.3	759.4	761.4	762.4	760.4
125°	811.8	815.9	813.8	816.9	817.9
127.5°	864.2	865.2	870.3	869.3	868.3
130°	914.5	915.6	918.6	919.7	919.7
132.5°	960.8	962.8	966.9	968.0	966.9
135°	1007.0	1006.0	1010.1	1012.1	1014.2
137.5°	1048.1	1048.1	1053.2	1055.3	1054.3
140°	1088.2	1090.2	1092.3	1095.4	1096.4
142.5°	1124.1	1128.3	1129.3	1131.3	1131.3
145°	1161.1	1164.2	1164.2	1165.3	1167.3
147.5°	1189.9	1196.1	1195.1	1196.1	1197.1
150°	1221.8	1225.9	1224.8	1224.8	1225.9
152.5°	1248.5	1251.6	1249.5	1251.6	1250.5
155°	1273.1	1274.2	1271.1	1275.2	1272.1
157.5°	1294.7	1294.7	1290.6	1295.8	1290.6
160°	1313.2	1310.1	1309.1	1315.3	1309.1
162.5°	1329.7	1325.6	1324.5	1330.7	1323.5
165°	1343.0	1337.9	1337.9	1346.1	1336.9
167.5°	1354.3	1349.2	1348.2	1357.4	1347.1
170°	1363.6	1357.4	1358.4	1366.7	1356.4
172.5°	1369.7	1363.6	1364.6	1372.8	1361.5
175°	1373.8	1367.7	1368.7	1378.0	1365.6
177.5°	1376.9	1369.7	1371.8	1380.0	1367.7
180°	1373.8	1373.8	1373.8	1373.8	1373.8

(END OF REPORT)