

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: P1033535

Luminaire Tested: S124DIW-B575D1050UB27-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033535
REPORT IS A COMBINATION OF REPORTS P997616 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB27-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

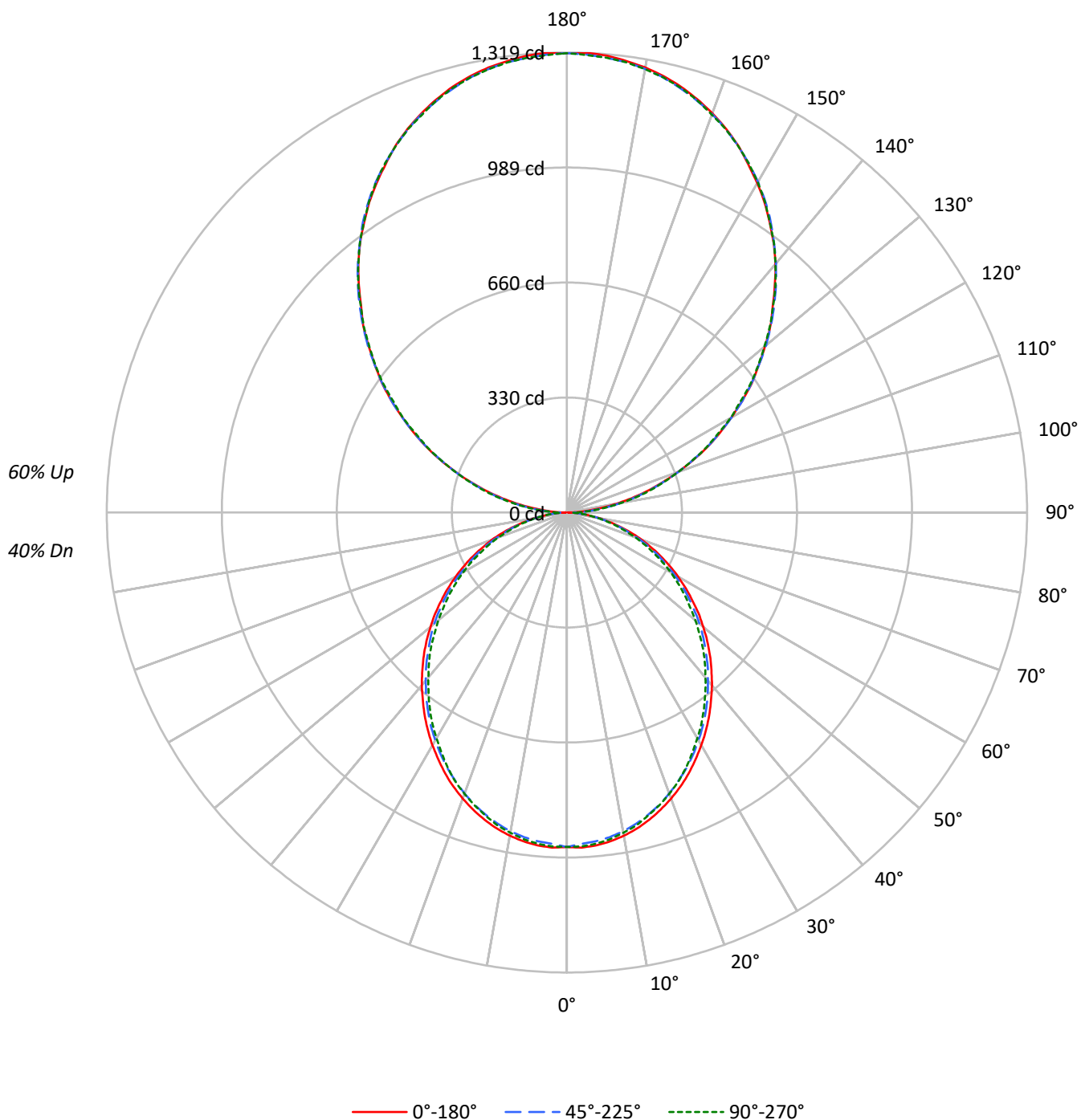
Lumens per Lamp: N/A
Luminaire Lumens: 6118.0 lumens
Efficiency: N/A
Efficacy: 110.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 55.5
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	40
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40	40	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	33	33	33	28
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28	28	28	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	25	25	21
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	26	23	21	21	21	18
6	61	49	41	36	56	45	38	33	38	32	28	30	26	23	24	21	19	19	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	17	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	15	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	13	13	13	11
10	46	34	27	22	41	31	25	20	26	21	18	21	18	15	17	14	12	12	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7819	7819	7819
5°	7826	7594	7603
10°	7759	7383	7331
15°	7648	7133	7025
20°	7506	6861	6708
25°	7345	6575	6366
30°	7153	6265	5990
35°	6953	5948	5628
40°	6745	5607	5242
45°	6527	5265	4882
50°	6284	4933	4482
55°	6022	4545	4086
60°	5753	4121	3673
65°	5445	3683	3208
70°	5091	3156	2709
75°	4562	2543	2169
80°	3887	1839	1527
85°	3020	1025	822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6527 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.4	1.5
10°-20°	254.6	4.2
20°-30°	374.7	6.1
30°-40°	435.6	7.1
40°-50°	435.5	7.1
50°-60°	380.9	6.2
60°-70°	282.8	4.6
70°-80°	160.5	2.6
80°-90°	48.8	0.8
90°-100°	85.9	1.4
100°-110°	257.1	4.2
110°-120°	436.8	7.1
120°-130°	576.1	9.4
130°-140°	647.0	10.6
140°-150°	635.9	10.4
150°-160°	534.9	8.7
160°-170°	355.9	5.8
170°-180°	124.6	2.0
0°-30°	719.7	11.8
0°-40°	1155.3	18.9
0°-60°	1971.8	32.2
0°-90°	2463.8	40.3
90°-120°	779.8	12.7
90°-150°	2638.8	43.1
90°-180°	3654.0	59.7
0°-180°	6118.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	959	959	959	959	959	
5°	958	955	946	955	953	91
15°	912	909	897	902	900	257
25°	826	820	810	810	808	380
35°	711	705	694	689	685	444
45°	580	575	562	554	552	447
55°	439	436	426	416	412	393
65°	297	294	286	278	274	294
75°	158	154	151	148	147	168
85°	42	42	40	40	39	45
90°	3	14	22	28	31	7
95°	61	70	77	80	80	66
105°	237	238	242	246	248	252
115°	444	444	442	441	440	438
125°	647	647	646	644	642	577
135°	834	840	840	838	835	645
145°	1014	1018	1019	1018	1014	634
155°	1161	1161	1160	1164	1160	534
165°	1264	1261	1259	1265	1261	356
175°	1315	1310	1309	1316	1309	125
180°	1317	1317	1317	1317	1317	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	958.8	958.8	958.8	958.8	958.8
2.5°	961.9	959.6	951.1	958.8	958.1
5°	958.1	955.0	946.5	955.0	953.4
7.5°	951.1	948.1	938.8	945.8	945.0
10°	941.2	938.1	928.1	934.2	932.7
12.5°	928.1	925.0	914.3	921.2	918.9
15°	912.0	908.9	897.4	902.0	899.7
17.5°	893.5	889.7	878.9	882.0	880.5
20°	872.8	868.9	857.4	859.7	858.2
22.5°	850.5	845.1	833.6	838.2	835.1
25°	825.9	820.5	809.8	810.5	807.5
27.5°	798.2	792.9	782.9	781.3	777.5
30°	770.6	764.4	754.5	751.4	747.5
32.5°	741.4	736.0	725.3	721.4	717.6
35°	710.7	705.3	694.5	689.2	685.3
37.5°	678.4	673.8	662.3	656.9	651.5
40°	646.9	640.8	629.2	621.5	617.7
42.5°	613.1	610.0	597.0	587.7	585.4
45°	580.1	574.7	562.4	553.9	551.6
47.5°	545.5	541.6	530.1	520.9	514.8
50°	510.1	507.1	496.3	485.6	480.9
52.5°	475.6	471.7	460.2	451.0	444.8
55°	438.7	436.4	425.6	416.4	411.8
57.5°	404.1	401.8	391.1	381.8	377.2
60°	368.0	364.2	354.2	347.3	343.4
62.5°	332.7	329.6	318.8	312.7	308.9
65°	297.3	293.5	285.8	278.1	274.3
67.5°	261.2	258.1	250.5	242.8	242.0
70°	228.2	222.8	216.7	210.5	208.2
72.5°	192.8	187.5	182.9	178.2	175.9
75°	158.3	154.4	150.6	147.5	146.7
77.5°	124.5	122.9	119.1	118.3	116.0
80°	94.5	92.2	90.7	89.1	88.4
82.5°	65.3	64.5	64.5	63.8	63.0
85°	41.5	41.5	40.0	40.0	39.2
87.5°	20.0	19.2	18.4	18.4	18.4
90°	3.1	14.3	22.4	28.5	30.6
92.5°	26.5	39.7	44.8	47.9	48.9
95°	61.1	70.3	77.4	80.5	80.5
97.5°	97.8	105.9	114.1	118.2	118.2
100°	142.6	146.7	155.8	157.9	157.9
102.5°	189.5	190.5	198.6	201.7	202.7
105°	237.3	238.3	242.4	245.5	248.5
107.5°	287.2	288.3	289.3	293.3	292.3
110°	338.2	340.2	339.2	337.1	340.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	391.1	391.1	389.1	389.1	389.1
115°	444.1	444.1	442.1	441.0	440.0
117.5°	494.0	494.0	493.0	489.9	486.9
120°	543.9	548.0	544.9	539.8	541.9
122.5°	595.9	596.9	595.9	592.8	587.7
125°	646.8	646.8	645.8	643.7	641.7
127.5°	692.6	695.7	693.6	691.6	690.6
130°	741.5	744.6	744.6	742.5	738.5
132.5°	791.4	793.5	792.4	790.4	789.4
135°	834.2	840.3	840.3	838.3	835.2
137.5°	882.1	885.1	887.2	884.1	885.1
140°	929.9	932.0	932.0	931.0	929.9
142.5°	973.7	975.8	974.8	974.8	974.8
145°	1013.5	1017.5	1018.6	1017.5	1014.5
147.5°	1054.2	1059.3	1058.3	1057.3	1056.2
150°	1090.9	1095.0	1095.0	1095.0	1093.9
152.5°	1125.5	1127.5	1128.6	1131.6	1128.6
155°	1161.2	1161.2	1160.1	1164.2	1160.1
157.5°	1191.7	1189.7	1189.7	1192.7	1189.7
160°	1218.2	1217.2	1216.2	1219.2	1214.1
162.5°	1242.6	1239.6	1238.6	1244.7	1239.6
165°	1264.0	1261.0	1258.9	1265.1	1261.0
167.5°	1281.3	1277.3	1277.3	1283.4	1277.3
170°	1295.6	1290.5	1291.5	1297.6	1290.5
172.5°	1305.8	1301.7	1301.7	1308.8	1301.7
175°	1315.0	1309.9	1308.8	1316.0	1308.8
177.5°	1319.0	1313.9	1313.9	1321.1	1312.9
180°	1317.0	1317.0	1317.0	1317.0	1317.0

(END OF REPORT)