

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: P1033534

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033534
REPORT IS A COMBINATION OF REPORTS P997615 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-F
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

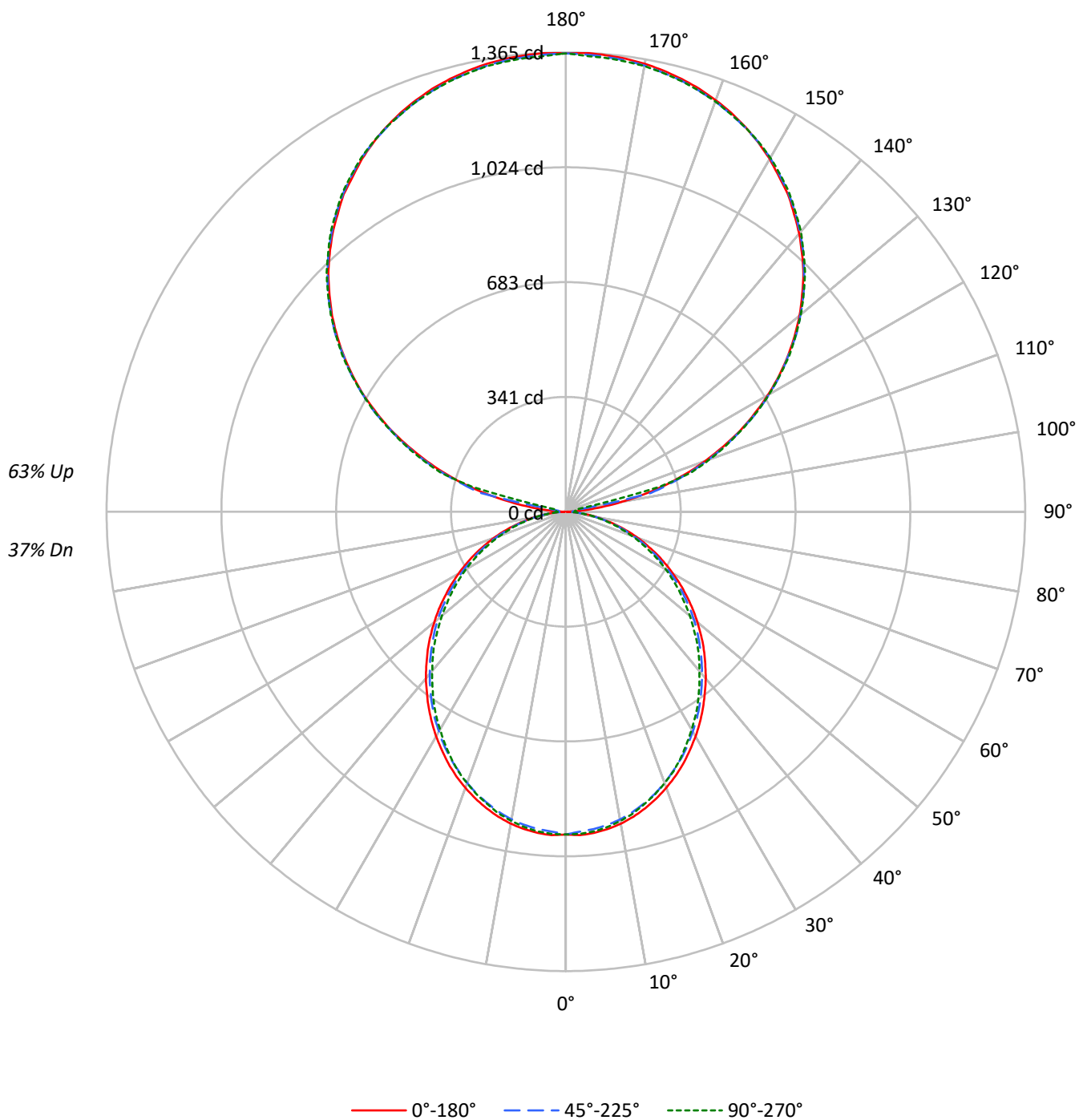
Lumens per Lamp: N/A
Luminaire Lumens: 6678.0 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	95	91	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	27
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	24	22	20
6	61	49	41	35	55	45	38	33	37	31	28	29	25	22	22	20	18
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	18	16
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	13
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	11

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	1.4
10°-20°	254.6	3.8
20°-30°	374.7	5.6
30°-40°	435.6	6.5
40°-50°	435.5	6.5
50°-60°	380.9	5.7
60°-70°	282.8	4.2
70°-80°	160.5	2.4
80°-90°	48.8	0.7
90°-100°	45.2	0.7
100°-110°	297.7	4.5
110°-120°	568.5	8.5
120°-130°	721.7	10.8
130°-140°	772.1	11.6
140°-150°	721.9	10.8
150°-160°	582.2	8.7
160°-170°	375.5	5.6
170°-180°	129.4	1.9
0°-30°	719.7	10.8
0°-40°	1155.3	17.3
0°-60°	1971.8	29.5
0°-90°	2463.8	36.9
90°-120°	911.4	13.6
90°-150°	3127.1	46.8
90°-180°	4214.0	63.1
0°-180°	6678.0	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	6
95°	56	21	22	28	30	69
105°	307	313	318	327	290	321
115°	572	576	574	576	576	563
125°	805	809	807	810	811	719
135°	998	997	1001	1003	1005	769
145°	1151	1154	1154	1155	1157	719
155°	1262	1263	1260	1264	1261	582
165°	1331	1326	1326	1334	1325	376
175°	1362	1356	1357	1366	1354	130
180°	1362	1362	1362	1362	1362	

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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°	15.3	13.2	21.4	27.5	27.5
95°	56.0	21.4	22.4	28.5	29.5
97.5°	107.0	129.4	22.4	27.5	28.5
100°	167.1	185.4	44.8	27.5	28.5
102.5°	234.3	246.5	258.7	29.5	29.5
105°	306.6	312.7	317.8	327.0	290.3
107.5°	372.8	375.9	383.0	388.1	392.2
110°	440.0	443.1	449.2	451.2	454.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	505.2	511.3	513.4	512.4	516.4
115°	572.5	575.5	574.5	576.5	576.5
117.5°	632.6	636.6	639.7	638.7	638.7
120°	693.7	697.8	696.7	698.8	696.7
122.5°	750.7	752.8	754.8	755.8	753.8
125°	804.7	808.8	806.7	809.8	810.8
127.5°	856.7	857.7	862.8	861.8	860.7
130°	906.6	907.6	910.6	911.7	911.7
132.5°	952.4	954.4	958.5	959.5	958.5
135°	998.2	997.2	1001.3	1003.3	1005.4
137.5°	1039.0	1039.0	1044.1	1046.1	1045.1
140°	1078.7	1080.8	1082.8	1085.9	1086.9
142.5°	1114.4	1118.4	1119.5	1121.5	1121.5
145°	1151.0	1154.1	1154.1	1155.1	1157.2
147.5°	1179.6	1185.7	1184.7	1185.7	1186.7
150°	1211.1	1215.2	1214.2	1214.2	1215.2
152.5°	1237.6	1240.7	1238.6	1240.7	1239.7
155°	1262.1	1263.1	1260.0	1264.1	1261.1
157.5°	1283.5	1283.5	1279.4	1284.5	1279.4
160°	1301.8	1298.7	1297.7	1303.8	1297.7
162.5°	1318.1	1314.0	1313.0	1319.1	1312.0
165°	1331.3	1326.2	1326.2	1334.4	1325.2
167.5°	1342.5	1337.4	1336.4	1345.6	1335.4
170°	1351.7	1345.6	1346.6	1354.8	1344.6
172.5°	1357.8	1351.7	1352.7	1360.9	1349.7
175°	1361.9	1355.8	1356.8	1366.0	1353.7
177.5°	1365.0	1357.8	1359.9	1368.0	1355.8
180°	1361.9	1361.9	1361.9	1361.9	1361.9

(END OF REPORT)