

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: P1033532

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

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033532
REPORT IS A COMBINATION OF REPORTS P997612 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-D
Description: Define 4 Direct/Indirect Wall Mount with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

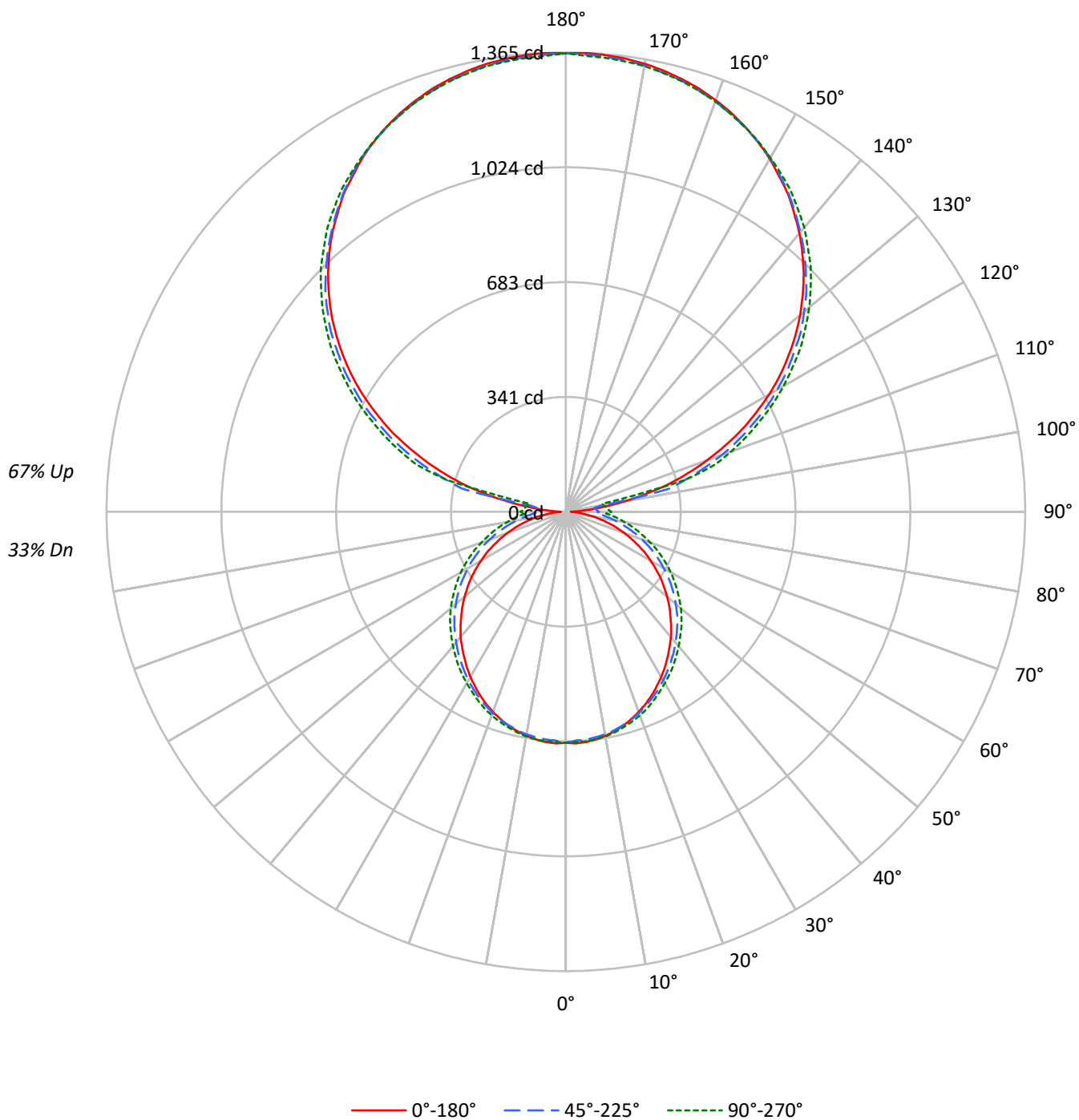
Lumens per Lamp: N/A
Luminaire Lumens: 6556.0 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	93	89	85	81	84	80	77	74	64	61	59	49	47	46	35	34	33
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	29	27
3	77	67	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23
4	70	59	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19
5	64	53	45	39	58	48	41	35	38	33	29	29	26	23	21	19	17
6	59	47	39	33	53	43	36	31	34	29	25	26	23	20	19	17	15
7	55	42	35	29	49	38	32	27	31	26	22	24	20	17	17	15	13
8	50	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	11
9	47	35	27	22	42	32	25	21	26	21	17	20	16	14	15	12	10
10	44	32	25	20	39	29	23	18	24	19	15	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5594	5594	5594
5°	5610	5448	5458
10°	5574	5341	5326
15°	5521	5220	5177
20°	5444	5090	5032
25°	5357	4946	4875
30°	5263	4804	4716
35°	5156	4658	4574
40°	5070	4518	4427
45°	4944	4387	4297
50°	4836	4238	4161
55°	4725	4094	4002
60°	4552	3915	3854
65°	4362	3723	3675
70°	4130	3502	3469
75°	3807	3256	3272
80°	3442	3008	3066
85°	2962	2757	2899

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5023 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	1.0
10°-20°	186.2	2.8
20°-30°	281.6	4.3
30°-40°	340.7	5.2
40°-50°	360.2	5.5
50°-60°	339.0	5.2
60°-70°	281.3	4.3
70°-80°	197.4	3.0
80°-90°	114.1	1.7
90°-100°	111.4	1.7
100°-110°	346.8	5.3
110°-120°	601.4	9.2
120°-130°	740.2	11.3
130°-140°	780.1	11.9
140°-150°	723.5	11.0
150°-160°	582.2	8.9
160°-170°	375.5	5.7
170°-180°	129.4	2.0
0°-30°	532.8	8.1
0°-40°	873.5	13.3
0°-60°	1572.7	24.0
0°-90°	2165.4	33.0
90°-120°	1059.6	16.2
90°-150°	3303.5	50.4
90°-180°	4391.0	67.0
0°-180°	6556.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	687	684	679	685	684	65
15°	658	659	657	664	663	186
25°	602	607	609	618	618	277
35°	527	536	544	555	557	330
45°	439	454	469	482	486	340
55°	344	360	383	399	403	307
65°	238	263	289	308	314	236
75°	132	161	193	214	221	140
85°	41	73	108	131	138	42
90°	15	57	98	127	135	11
95°	66	57	89	116	124	77
105°	314	335	368	397	366	329
115°	577	587	611	630	635	568
125°	808	811	828	846	852	722
135°	1000	999	1008	1022	1029	771
145°	1152	1154	1154	1160	1165	720
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°	686.0	686.0	686.0	686.0	686.0
2.5°	689.1	686.8	680.7	686.0	685.3
5°	686.8	684.5	679.1	685.3	684.5
7.5°	682.2	680.7	676.1	683.0	682.2
10°	676.1	675.3	671.4	678.4	677.6
12.5°	667.6	667.6	665.3	671.4	671.4
15°	658.4	659.2	656.8	663.8	663.0
17.5°	646.1	648.4	647.6	654.5	653.8
20°	633.0	635.3	636.1	643.8	643.8
22.5°	618.4	621.5	623.0	630.7	632.3
25°	602.3	606.9	609.2	617.7	618.4
27.5°	584.6	591.5	594.6	602.3	603.1
30°	567.0	573.1	578.5	586.9	588.5
32.5°	547.8	555.4	561.6	571.6	573.1
35°	527.0	536.2	543.9	554.7	557.0
37.5°	506.3	517.0	526.2	537.0	539.3
40°	486.3	496.3	507.0	518.6	521.6
42.5°	463.3	474.8	487.8	500.9	503.2
45°	439.4	454.0	468.6	481.7	485.5
47.5°	417.2	431.8	448.7	461.7	466.3
50°	392.6	409.5	426.4	441.7	446.4
52.5°	368.0	384.9	404.9	420.2	424.8
55°	344.2	360.3	383.4	398.7	403.3
57.5°	317.3	337.3	359.5	378.0	381.8
60°	291.2	311.1	336.5	354.2	360.3
62.5°	265.8	288.1	313.4	331.1	337.3
65°	238.2	262.7	288.9	308.1	314.2
67.5°	212.0	238.2	265.8	285.0	291.2
70°	185.1	211.3	240.5	261.2	266.6
72.5°	159.0	185.9	217.4	237.4	243.5
75°	132.1	160.6	192.8	214.3	221.3
77.5°	106.8	136.7	170.6	192.1	199.7
80°	83.7	114.5	148.3	171.3	177.5
82.5°	60.7	93.0	126.8	150.6	157.5
85°	40.7	73.0	107.6	130.6	138.3
87.5°	25.4	56.9	90.7	112.9	119.8
90°	15.4	57.3	98.5	126.8	135.1
92.5°	26.8	51.6	92.8	120.5	126.6
95°	66.0	56.7	89.2	116.1	124.0
97.5°	116.2	160.9	85.4	110.5	118.4
100°	175.6	213.8	103.2	106.6	113.0
102.5°	242.8	271.9	313.2	104.0	110.2
105°	313.5	335.0	368.5	396.9	366.4
107.5°	379.7	395.9	429.9	454.2	463.6
110°	446.1	460.0	493.0	512.7	521.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	510.6	525.9	553.3	569.3	579.4
115°	577.1	587.0	610.6	629.5	634.9
117.5°	637.2	645.8	672.0	687.1	693.2
120°	697.5	703.9	725.1	742.6	746.6
122.5°	754.5	756.6	779.4	795.7	799.1
125°	807.8	811.1	828.2	845.9	851.5
127.5°	859.8	860.0	880.5	893.3	897.6
130°	908.9	909.1	924.4	939.4	944.0
132.5°	954.7	955.9	969.3	983.3	986.9
135°	999.7	998.7	1008.2	1022.5	1029.2
137.5°	1040.5	1039.8	1047.9	1061.5	1064.3
140°	1080.2	1081.6	1084.3	1097.4	1102.3
142.5°	1115.2	1119.2	1119.5	1130.0	1133.0
145°	1151.8	1154.1	1154.1	1159.7	1164.9
147.5°	1180.4	1185.7	1184.7	1186.5	1190.5
150°	1211.9	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)