

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: P1033552

Luminaire Tested: S124DIW-B575D1050UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033552
REPORT IS A COMBINATION OF REPORTS P997663 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

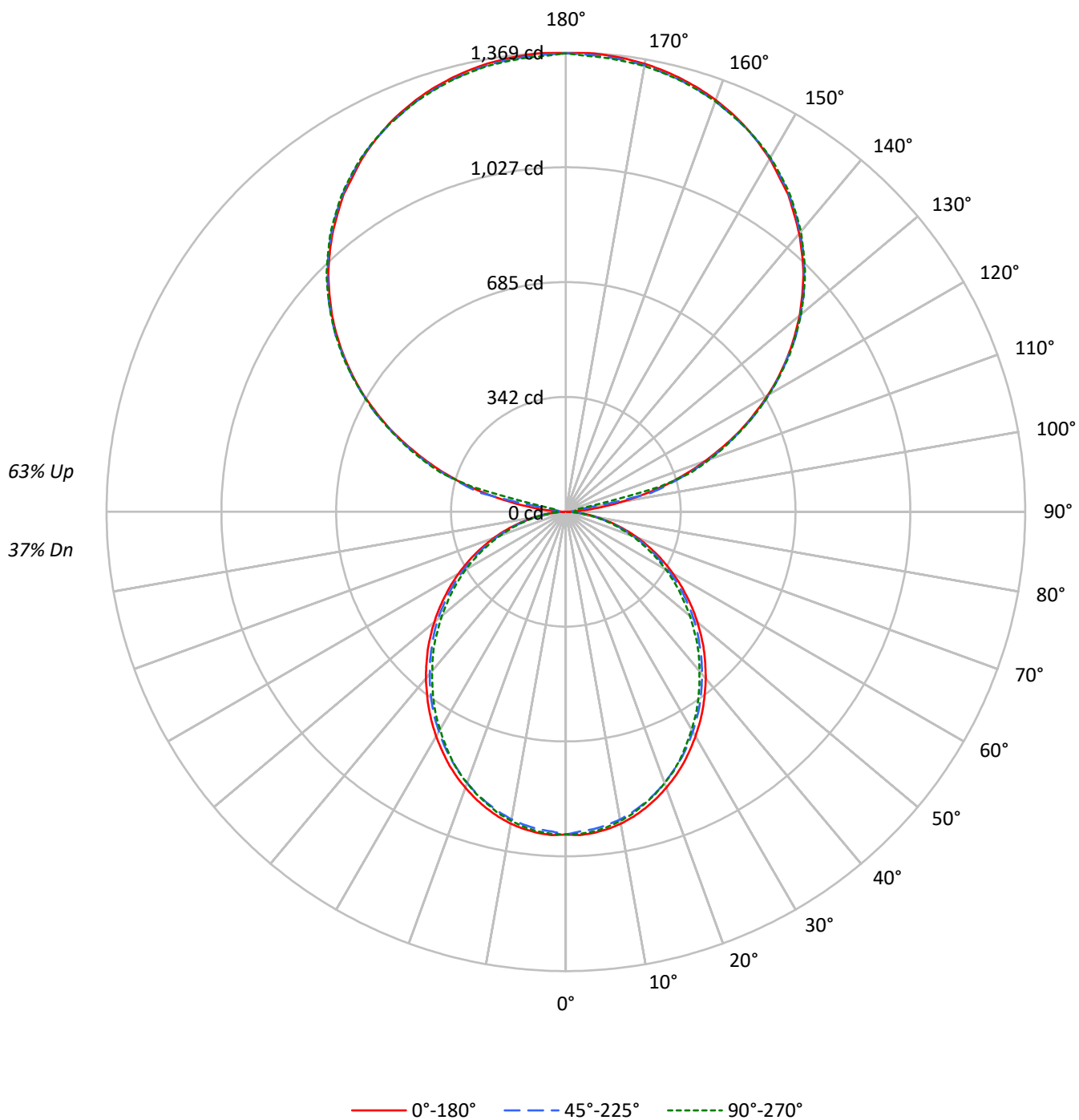
Lumens per Lamp: N/A
Luminaire Lumens: 6698.0 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	7841	7841	7841
5°	7848	7615	7625
10°	7781	7404	7353
15°	7669	7153	7045
20°	7527	6880	6726
25°	7367	6594	6384
30°	7173	6283	6008
35°	6973	5965	5644
40°	6763	5623	5258
45°	6545	5280	4896
50°	6302	4947	4495
55°	6038	4558	4098
60°	5770	4133	3683
65°	5461	3693	3217
70°	5104	3164	2717
75°	4573	2550	2176
80°	3899	1844	1530
85°	3027	1028	824

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6545 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.4
10°-20°	255.3	3.8
20°-30°	375.8	5.6
30°-40°	436.8	6.5
40°-50°	436.8	6.5
50°-60°	382.0	5.7
60°-70°	283.6	4.2
70°-80°	160.9	2.4
80°-90°	48.9	0.7
90°-100°	45.4	0.7
100°-110°	298.6	4.5
110°-120°	570.3	8.5
120°-130°	723.9	10.8
130°-140°	774.4	11.6
140°-150°	724.2	10.8
150°-160°	584.0	8.7
160°-170°	376.6	5.6
170°-180°	129.8	1.9
0°-30°	721.7	10.8
0°-40°	1158.6	17.3
0°-60°	1977.4	29.5
0°-90°	2470.8	36.9
90°-120°	914.3	13.6
90°-150°	3136.8	46.8
90°-180°	4227.0	63.1
0°-180°	6698.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	962	962	962	962	962	
5°	961	958	949	958	956	91
15°	914	912	900	904	902	258
25°	828	823	812	813	810	381
35°	713	707	696	691	687	446
45°	582	576	564	556	553	448
55°	440	438	427	418	413	394
65°	298	294	287	279	275	295
75°	159	155	151	148	147	168
85°	42	42	40	40	39	45
90°	3	14	22	29	31	6
95°	56	22	22	29	30	69
105°	308	314	319	328	291	322
115°	574	577	576	578	578	565
125°	807	811	809	812	813	721
135°	1001	1000	1004	1006	1008	772
145°	1155	1158	1158	1159	1161	721
155°	1266	1267	1264	1268	1265	584
165°	1335	1330	1330	1338	1329	377
175°	1366	1360	1361	1370	1358	130
180°	1366	1366	1366	1366	1366	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	961.5	961.5	961.5	961.5	961.5
2.5°	964.6	962.3	953.8	961.5	960.8
5°	960.8	957.7	949.2	957.7	956.2
7.5°	953.8	950.8	941.5	948.4	947.7
10°	943.8	940.7	930.7	936.9	935.4
12.5°	930.7	927.6	916.9	923.8	921.5
15°	914.5	911.5	899.9	904.5	902.2
17.5°	896.1	892.2	881.4	884.5	883.0
20°	875.3	871.4	859.8	862.2	860.6
22.5°	852.9	847.5	836.0	840.6	837.5
25°	828.3	822.9	812.1	812.8	809.8
27.5°	800.5	795.1	785.1	783.6	779.7
30°	772.8	766.6	756.6	753.5	749.7
32.5°	743.5	738.1	727.3	723.5	719.6
35°	712.7	707.3	696.5	691.1	687.3
37.5°	680.3	675.7	664.1	658.8	653.4
40°	648.7	642.6	631.0	623.3	619.5
42.5°	614.8	611.8	598.7	589.4	587.1
45°	581.7	576.3	564.0	555.5	553.2
47.5°	547.0	543.2	531.6	522.4	516.2
50°	511.6	508.5	497.7	486.9	482.3
52.5°	476.9	473.1	461.5	452.3	446.1
55°	439.9	437.6	426.8	417.6	413.0
57.5°	405.3	403.0	392.2	382.9	378.3
60°	369.1	365.2	355.2	348.3	344.4
62.5°	333.6	330.5	319.7	313.6	309.7
65°	298.2	294.3	286.6	278.9	275.1
67.5°	262.0	258.9	251.2	243.5	242.7
70°	228.8	223.4	217.3	211.1	208.8
72.5°	193.4	188.0	183.4	178.7	176.4
75°	158.7	154.9	151.0	147.9	147.2
77.5°	124.8	123.3	119.4	118.7	116.3
80°	94.8	92.5	90.9	89.4	88.6
82.5°	65.5	64.7	64.7	63.9	63.2
85°	41.6	41.6	40.1	40.1	39.3
87.5°	20.0	19.3	18.5	18.5	18.5
90°	3.1	14.3	22.5	28.6	30.7
92.5°	15.3	13.3	21.5	27.6	27.6
95°	56.2	21.5	22.5	28.6	29.6
97.5°	107.3	129.8	22.5	27.6	28.6
100°	167.6	186.0	45.0	27.6	28.6
102.5°	235.0	247.3	259.5	29.6	29.6
105°	307.6	313.7	318.8	328.0	291.2
107.5°	374.0	377.0	384.2	389.3	393.4
110°	441.4	444.5	450.6	452.6	455.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	506.8	512.9	515.0	513.9	518.0
115°	574.2	577.3	576.3	578.3	578.3
117.5°	634.5	638.6	641.7	640.6	640.6
120°	695.8	699.9	698.9	700.9	698.9
122.5°	753.0	755.1	757.1	758.1	756.1
125°	807.2	811.3	809.2	812.3	813.3
127.5°	859.3	860.3	865.4	864.4	863.4
130°	909.4	910.4	913.5	914.5	914.5
132.5°	955.3	957.4	961.5	962.5	961.5
135°	1001.3	1000.3	1004.4	1006.4	1008.5
137.5°	1042.2	1042.2	1047.3	1049.3	1048.3
140°	1082.0	1084.1	1086.1	1089.2	1090.2
142.5°	1117.8	1121.9	1122.9	1125.0	1125.0
145°	1154.6	1157.7	1157.7	1158.7	1160.7
147.5°	1183.2	1189.3	1188.3	1189.3	1190.4
150°	1214.9	1219.0	1217.9	1217.9	1219.0
152.5°	1241.4	1244.5	1242.5	1244.5	1243.5
155°	1266.0	1267.0	1263.9	1268.0	1264.9
157.5°	1287.4	1287.4	1283.3	1288.4	1283.3
160°	1305.8	1302.7	1301.7	1307.9	1301.7
162.5°	1322.2	1318.1	1317.1	1323.2	1316.0
165°	1335.4	1330.3	1330.3	1338.5	1329.3
167.5°	1346.7	1341.6	1340.6	1349.7	1339.5
170°	1355.9	1349.7	1350.8	1358.9	1348.7
172.5°	1362.0	1355.9	1356.9	1365.1	1353.8
175°	1366.1	1360.0	1361.0	1370.2	1357.9
177.5°	1369.2	1362.0	1364.1	1372.2	1360.0
180°	1366.1	1366.1	1366.1	1366.1	1366.1

(END OF REPORT)