

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: P1033550

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033550
REPORT IS A COMBINATION OF REPORTS P997660 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-D
Description: Define 4 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

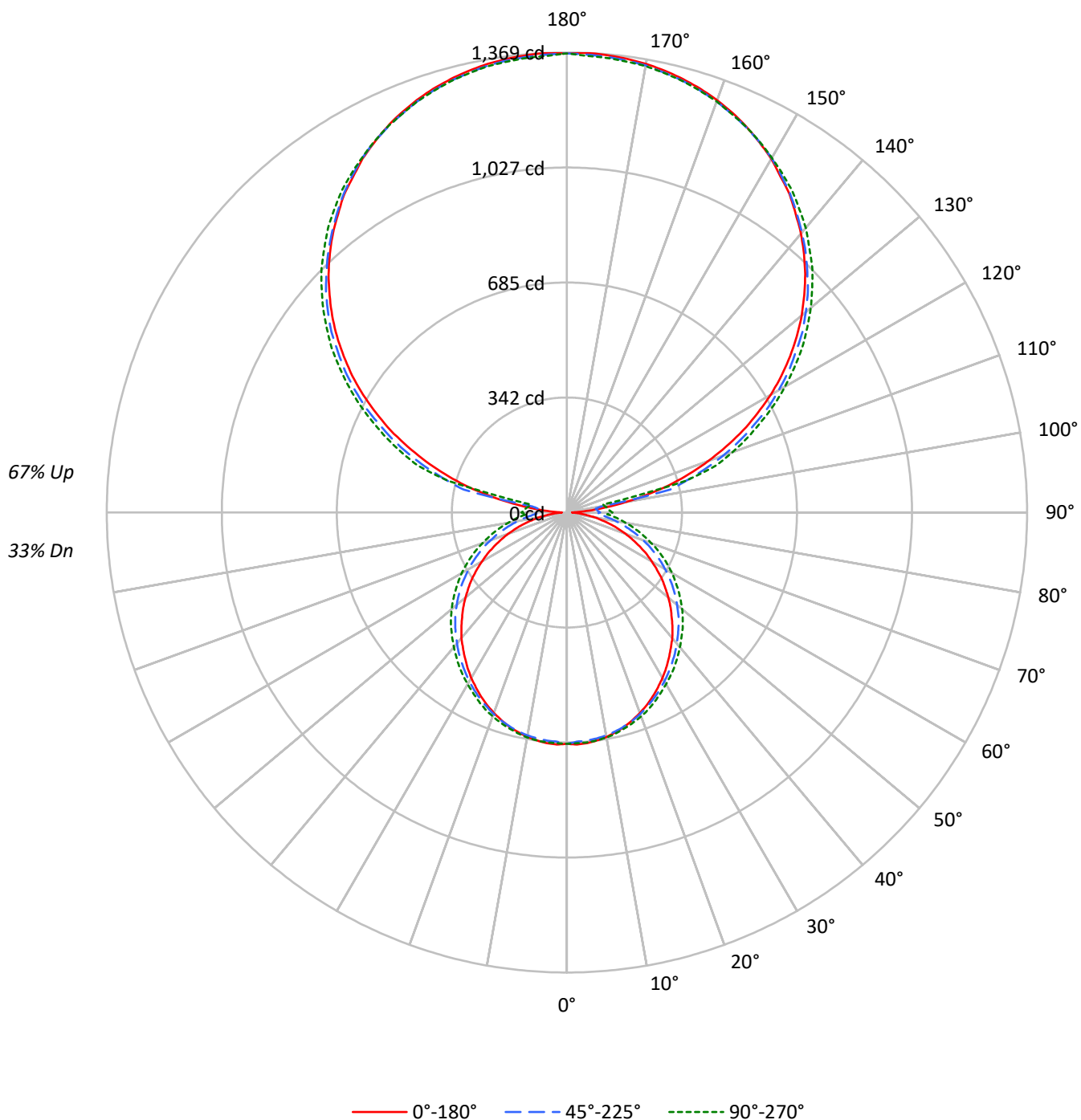
Lumens per Lamp: N/A
Luminaire Lumens: 6576.0 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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					0
RW	70	50	30	10	70	50	30	10	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	33		
1	93	89	85	81	84	80	77	74	64	61	59	49	47	46	35	34	33	26		
2	85	77	71	66	76	70	64	60	55	52	48	42	40	37	30	29	27	22		
3	77	67	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18		
4	70	59	52	46	63	54	47	42	43	38	34	33	29	27	23	21	19	15		
5	64	53	45	39	58	48	41	35	38	33	29	29	26	23	21	19	17	13		
6	59	47	39	33	53	43	36	31	34	29	25	26	23	20	19	17	15	11		
7	55	42	35	29	49	38	32	27	31	26	22	24	20	17	17	15	13	10		
8	50	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9		
9	47	35	27	22	42	32	25	21	26	21	17	20	16	14	15	12	10	8		
10	44	32	25	20	39	29	23	18	24	19	15	18	15	12	13	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5611	5611	5611
5°	5627	5465	5475
10°	5590	5358	5342
15°	5538	5236	5192
20°	5460	5105	5047
25°	5373	4961	4890
30°	5279	4818	4730
35°	5172	4672	4587
40°	5086	4532	4440
45°	4959	4400	4310
50°	4850	4251	4173
55°	4738	4106	4014
60°	4565	3927	3865
65°	4375	3733	3686
70°	4143	3512	3479
75°	3818	3266	3281
80°	3455	3016	3075
85°	2969	2765	2907

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°	65.2	1.0
10°-20°	186.8	2.8
20°-30°	282.4	4.3
30°-40°	341.7	5.2
40°-50°	361.2	5.5
50°-60°	340.0	5.2
60°-70°	282.1	4.3
70°-80°	198.0	3.0
80°-90°	114.4	1.7
90°-100°	111.8	1.7
100°-110°	347.8	5.3
110°-120°	603.3	9.2
120°-130°	742.5	11.3
130°-140°	782.5	11.9
140°-150°	725.8	11.0
150°-160°	584.0	8.9
160°-170°	376.6	5.7
170°-180°	129.8	2.0
0°-30°	534.4	8.1
0°-40°	876.2	13.3
0°-60°	1577.4	24.0
0°-90°	2171.9	33.0
90°-120°	1062.9	16.2
90°-150°	3313.7	50.4
90°-180°	4404.0	67.0
0°-180°	6576.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	688	688	688	688	688	
5°	689	687	681	687	687	65
15°	660	661	659	666	665	186
25°	604	609	611	620	620	278
35°	529	538	546	556	559	331
45°	441	455	470	483	487	341
55°	345	361	384	400	404	308
65°	239	264	290	309	315	237
75°	132	161	193	215	222	141
85°	41	73	108	131	139	43
90°	15	58	99	127	136	11
95°	66	57	90	116	124	77
105°	314	336	370	398	368	330
115°	579	589	612	632	637	570
125°	810	814	831	848	854	724
135°	1003	1002	1011	1026	1032	773
145°	1155	1158	1158	1163	1168	722
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°	688.1	688.1	688.1	688.1	688.1
2.5°	691.2	688.9	682.7	688.1	687.3
5°	688.9	686.6	681.2	687.3	686.6
7.5°	684.2	682.7	678.1	685.0	684.2
10°	678.1	677.3	673.5	680.4	679.6
12.5°	669.6	669.6	667.3	673.5	673.5
15°	660.4	661.1	658.8	665.7	665.0
17.5°	648.0	650.3	649.6	656.5	655.7
20°	634.9	637.2	638.0	645.7	645.7
22.5°	620.3	623.4	624.9	632.6	634.2
25°	604.1	608.7	611.0	619.5	620.3
27.5°	586.4	593.3	596.4	604.1	604.9
30°	568.7	574.8	580.2	588.7	590.2
32.5°	549.4	557.1	563.3	573.3	574.8
35°	528.6	537.8	545.5	556.3	558.6
37.5°	507.8	518.6	527.8	538.6	540.9
40°	487.8	497.8	508.6	520.1	523.2
42.5°	464.6	476.2	489.3	502.4	504.7
45°	440.8	455.4	470.0	483.1	487.0
47.5°	418.4	433.0	450.0	463.1	467.7
50°	393.7	410.7	427.7	443.1	447.7
52.5°	369.1	386.0	406.1	421.5	426.1
55°	345.2	361.4	384.5	399.9	404.5
57.5°	318.2	338.3	360.6	379.1	383.0
60°	292.0	312.1	337.5	355.2	361.4
62.5°	266.6	289.0	314.4	332.1	338.3
65°	238.9	263.5	289.7	309.0	315.2
67.5°	212.7	238.9	266.6	285.9	292.0
70°	185.7	211.9	241.2	262.0	267.4
72.5°	159.5	186.5	218.1	238.1	244.3
75°	132.5	161.0	193.4	215.0	221.9
77.5°	107.1	137.2	171.1	192.6	200.3
80°	84.0	114.8	148.7	171.8	178.0
82.5°	60.9	93.2	127.1	151.0	158.0
85°	40.8	73.2	107.9	131.0	138.7
87.5°	25.4	57.0	90.9	113.3	120.2
90°	15.4	57.5	98.8	127.2	135.5
92.5°	26.9	51.8	93.2	120.8	127.0
95°	66.2	56.9	89.5	116.4	124.4
97.5°	116.5	161.4	85.7	110.8	118.8
100°	176.1	214.5	103.6	107.0	113.4
102.5°	243.5	272.7	314.2	104.3	110.5
105°	314.5	336.0	369.7	398.1	367.5
107.5°	380.9	397.0	431.2	455.6	465.1
110°	447.6	461.5	494.5	514.2	523.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	512.2	527.5	555.1	570.9	581.2
115°	578.8	588.9	612.5	631.5	636.9
117.5°	639.1	647.8	674.1	689.1	695.3
120°	699.7	706.1	727.4	744.8	749.0
122.5°	756.9	759.0	781.8	798.2	801.6
125°	810.3	813.6	830.8	848.5	854.1
127.5°	862.4	862.6	883.1	896.0	900.4
130°	911.7	911.9	927.4	942.2	946.9
132.5°	957.6	958.9	972.3	986.4	990.0
135°	1002.8	1001.8	1011.3	1025.7	1032.4
137.5°	1043.7	1043.0	1051.2	1064.7	1067.6
140°	1083.5	1084.9	1087.6	1100.8	1105.6
142.5°	1118.6	1122.7	1122.9	1133.5	1136.6
145°	1155.4	1157.7	1157.7	1163.3	1168.4
147.5°	1184.0	1189.3	1188.3	1190.1	1194.3
150°	1215.7	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)