

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: P1033556

Luminaire Tested: S124DIW-B575D1050UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033556
REPORT IS A COMBINATION OF REPORTS P997669 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB50-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Wall Mount with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

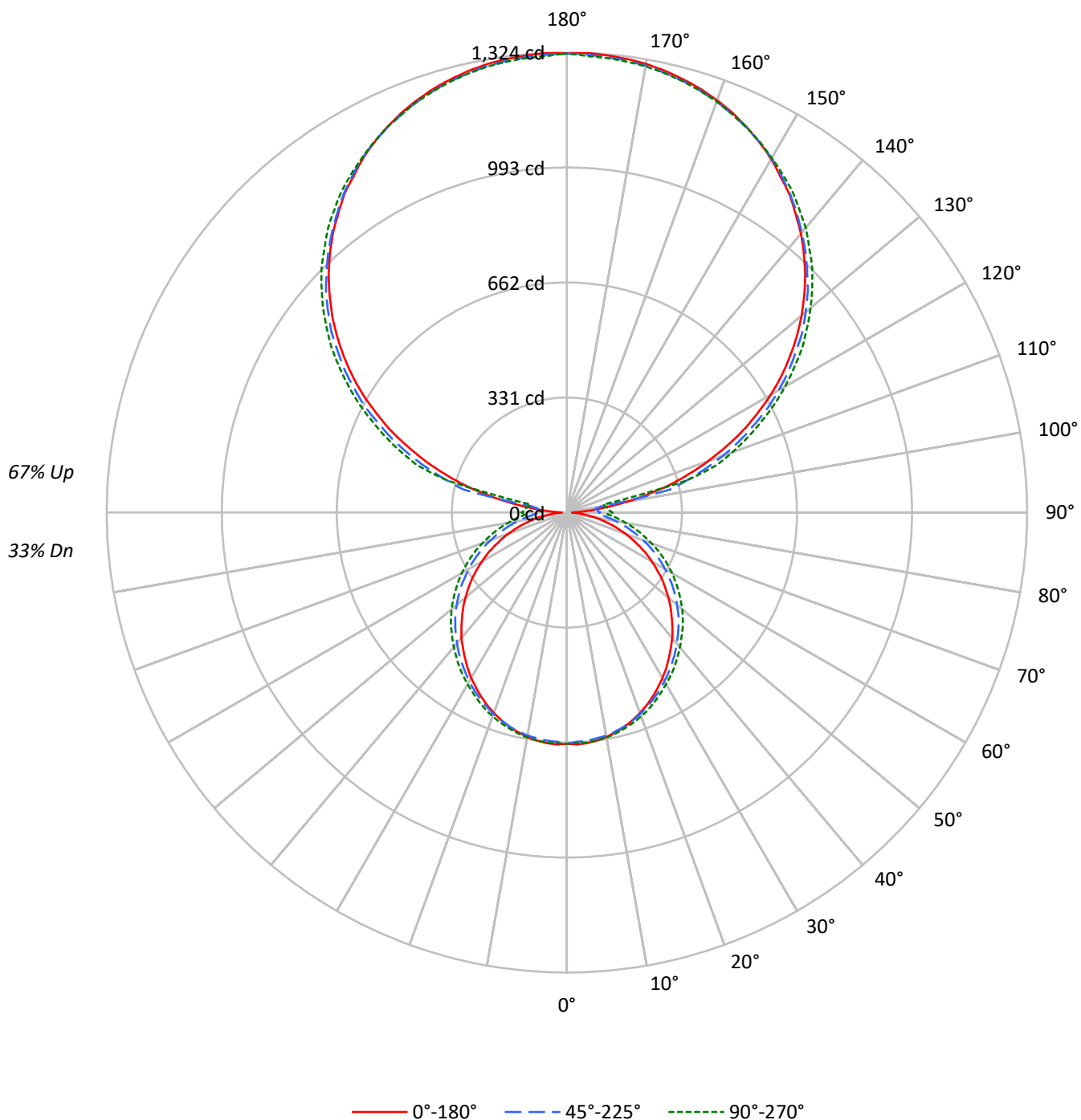
Lumens per Lamp: N/A
Luminaire Lumens: 6359.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

TEST NUMBER: P1033556

CATALOG NUMBER: S124DIW-B575D1050UB50-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P1033556

CATALOG NUMBER: S124DIW-B575D1050UB50-4F0-XX-W2A-D

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°	5427	5427	5427
5°	5442	5285	5295
10°	5406	5182	5167
15°	5356	5065	5022
20°	5281	4938	4881
25°	5197	4798	4729
30°	5105	4660	4575
35°	5001	4518	4437
40°	4918	4383	4294
45°	4796	4255	4168
50°	4691	4111	4036
55°	4583	3972	3883
60°	4416	3798	3738
65°	4230	3611	3565
70°	4007	3397	3364
75°	3694	3160	3173
80°	3340	2916	2975
85°	2874	2673	2811

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 4860 cd/sqm

TEST NUMBER: P1033556

CATALOG NUMBER: S124DIW-B575D1050UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.0
10°-20°	180.7	2.8
20°-30°	273.2	4.3
30°-40°	330.5	5.2
40°-50°	349.4	5.5
50°-60°	328.8	5.2
60°-70°	272.9	4.3
70°-80°	191.5	3.0
80°-90°	110.7	1.7
90°-100°	108.1	1.7
100°-110°	336.4	5.3
110°-120°	583.3	9.2
120°-130°	718.0	11.3
130°-140°	756.6	11.9
140°-150°	701.7	11.0
150°-160°	564.7	8.9
160°-170°	364.2	5.7
170°-180°	125.5	2.0
0°-30°	516.9	8.1
0°-40°	847.4	13.3
0°-60°	1525.6	24.0
0°-90°	2100.6	33.0
90°-120°	1027.8	16.2
90°-150°	3204.1	50.4
90°-180°	4258.0	67.0
0°-180°	6359.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	666	666	666	666	666	
5°	666	664	659	665	664	63
15°	639	639	637	644	643	180
25°	584	589	591	599	600	269
35°	511	520	528	538	540	320
45°	426	440	455	467	471	329
55°	334	350	372	387	391	298
65°	231	255	280	299	305	229
75°	128	156	187	208	215	136
85°	40	71	104	127	134	41
90°	15	56	96	123	131	11
95°	64	55	86	113	120	75
105°	304	325	357	385	355	319
115°	560	569	592	611	616	551
125°	784	787	803	820	826	700
135°	970	969	978	992	998	747
145°	1117	1119	1119	1125	1130	698
155°	1224	1225	1222	1226	1223	564
165°	1291	1286	1286	1294	1285	365
175°	1321	1315	1316	1325	1313	126
180°	1321	1321	1321	1321	1321	

TEST NUMBER: P1033556

CATALOG NUMBER: S124DIW-B575D1050UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	665.5	665.5	665.5	665.5	665.5
2.5°	668.5	666.3	660.3	665.5	664.8
5°	666.3	664.0	658.8	664.8	664.0
7.5°	661.8	660.3	655.8	662.5	661.8
10°	655.8	655.1	651.4	658.1	657.3
12.5°	647.6	647.6	645.4	651.4	651.4
15°	638.7	639.4	637.2	643.9	643.2
17.5°	626.8	629.0	628.2	635.0	634.2
20°	614.1	616.3	617.1	624.5	624.5
22.5°	599.9	602.9	604.4	611.9	613.3
25°	584.3	588.7	591.0	599.2	599.9
27.5°	567.1	573.8	576.8	584.3	585.0
30°	550.0	556.0	561.2	569.4	570.9
32.5°	531.4	538.8	544.8	554.5	556.0
35°	511.2	520.2	527.6	538.1	540.3
37.5°	491.1	501.6	510.5	520.9	523.2
40°	471.7	481.4	491.9	503.0	506.0
42.5°	449.4	460.6	473.2	485.9	488.1
45°	426.3	440.4	454.6	467.3	471.0
47.5°	404.7	418.8	435.2	447.9	452.4
50°	380.8	397.2	413.6	428.5	433.0
52.5°	357.0	373.4	392.7	407.7	412.1
55°	333.9	349.5	371.9	386.8	391.3
57.5°	307.8	327.2	348.8	366.7	370.4
60°	282.5	301.8	326.4	343.6	349.5
62.5°	257.9	279.5	304.1	321.2	327.2
65°	231.0	254.9	280.2	298.8	304.8
67.5°	205.7	231.0	257.9	276.5	282.5
70°	179.6	204.9	233.3	253.4	258.6
72.5°	154.3	180.4	210.9	230.3	236.2
75°	128.2	155.8	187.1	207.9	214.6
77.5°	103.6	132.7	165.4	186.3	193.8
80°	81.2	111.0	143.8	166.2	172.2
82.5°	58.9	90.2	123.0	146.1	152.8
85°	39.5	70.8	104.3	126.7	134.1
87.5°	24.6	55.1	87.9	109.6	116.3
90°	14.9	55.5	95.5	123.1	131.0
92.5°	26.0	50.1	90.0	116.9	122.8
95°	64.0	55.0	86.5	112.7	120.4
97.5°	112.6	156.1	82.8	107.2	114.9
100°	170.2	207.4	100.1	103.5	109.7
102.5°	235.4	263.7	303.8	101.0	107.0
105°	304.1	324.9	357.4	384.9	355.4
107.5°	368.3	384.0	417.0	440.5	449.7
110°	432.8	446.2	478.2	497.3	506.2

TEST NUMBER: P1033556

CATALOG NUMBER: S124DIW-B575D1050UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	495.2	510.1	536.7	552.0	562.0
115°	559.7	569.4	592.2	610.6	615.8
117.5°	618.0	626.4	651.7	666.4	672.3
120°	676.5	682.7	703.4	720.2	724.2
122.5°	731.8	733.8	755.9	771.9	775.1
125°	783.5	786.6	803.4	820.4	825.9
127.5°	833.9	834.0	853.9	866.4	870.6
130°	881.5	881.8	896.6	911.0	915.5
132.5°	925.9	927.2	940.1	953.7	957.3
135°	969.7	968.7	977.8	991.7	998.2
137.5°	1009.2	1008.4	1016.3	1029.5	1032.2
140°	1047.7	1048.9	1051.7	1064.3	1069.0
142.5°	1081.5	1085.5	1085.8	1095.9	1098.9
145°	1117.1	1119.3	1119.3	1124.8	1129.8
147.5°	1144.7	1150.0	1149.0	1150.7	1154.7
150°	1175.4	1178.6	1177.6	1177.6	1178.6
152.5°	1200.4	1203.3	1201.3	1203.3	1202.3
155°	1224.1	1225.1	1222.1	1226.0	1223.1
157.5°	1244.8	1244.8	1240.9	1245.8	1240.9
160°	1262.6	1259.6	1258.6	1264.6	1258.6
162.5°	1278.4	1274.4	1273.5	1279.4	1272.5
165°	1291.2	1286.3	1286.3	1294.2	1285.3
167.5°	1302.1	1297.2	1296.2	1305.1	1295.2
170°	1311.0	1305.1	1306.1	1314.0	1304.1
172.5°	1316.9	1311.0	1312.0	1319.9	1309.0
175°	1320.9	1315.0	1315.9	1324.8	1313.0
177.5°	1323.8	1316.9	1318.9	1326.8	1315.0
180°	1320.9	1320.9	1320.9	1320.9	1320.9

(END OF REPORT)