

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: P1033541

Luminaire Tested: S124DIW-B575D1050UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033541
REPORT IS A COMBINATION OF REPORTS P997646 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D1050UB30-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

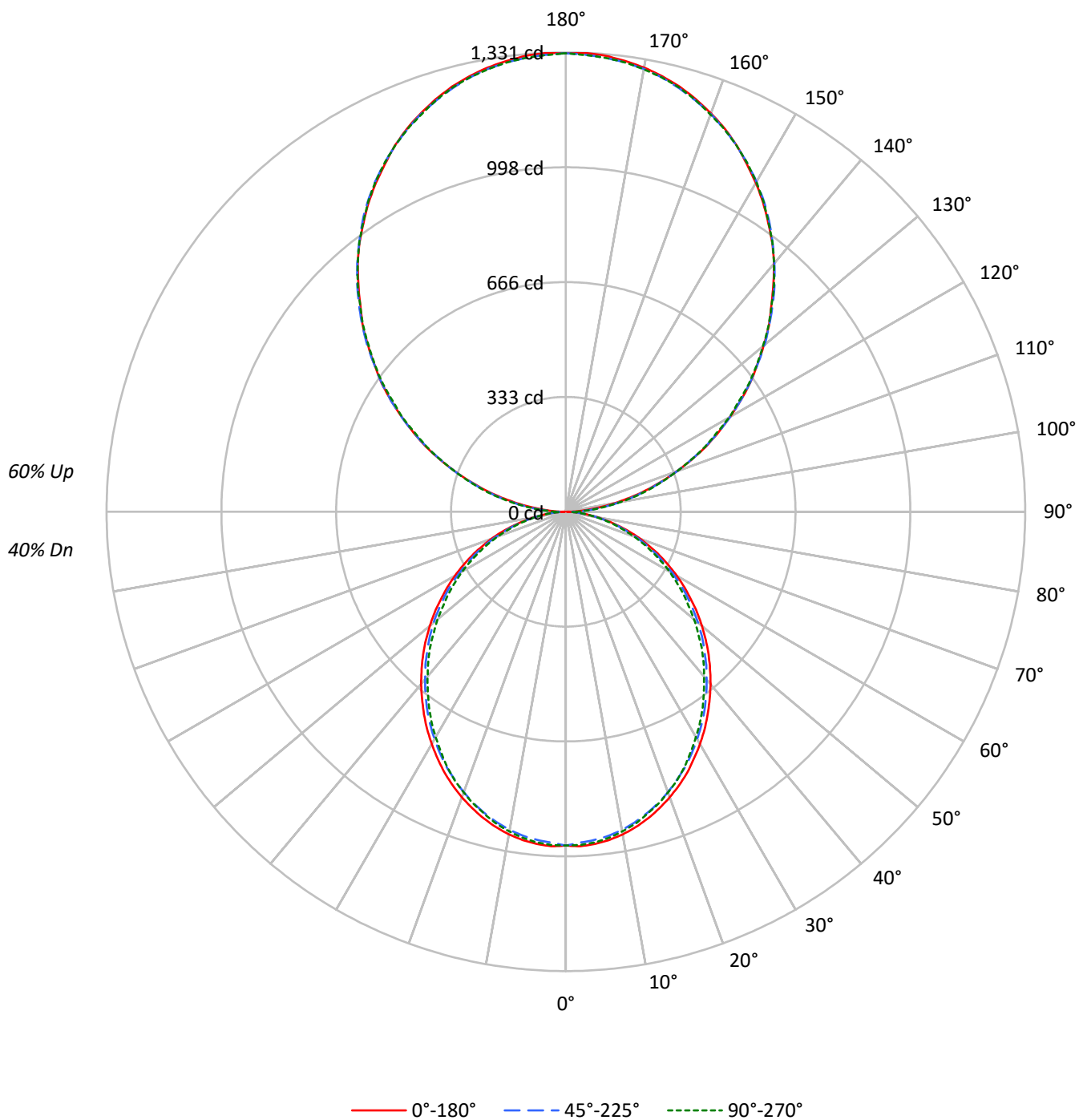
Lumens per Lamp: N/A
Luminaire Lumens: 6171.0 lumens
Efficiency: N/A
Efficacy: 111.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	96	91	87	84	87	83	80	77	68	66	64	54	53	51	42	41	40
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	33
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	32	30	28
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25
5	67	55	47	41	60	50	43	38	42	37	32	34	30	27	26	23	21
6	61	49	41	36	56	45	38	33	38	32	28	30	26	23	24	21	19
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	13
10	46	34	27	22	41	31	25	20	26	21	18	21	18	15	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7885	7885	7885
5°	7892	7659	7668
10°	7825	7446	7394
15°	7713	7193	7084
20°	7569	6920	6765
25°	7409	6631	6420
30°	7214	6318	6042
35°	7012	5999	5676
40°	6802	5655	5287
45°	6582	5309	4923
50°	6338	4974	4521
55°	6073	4585	4121
60°	5801	4156	3705
65°	5492	3714	3235
70°	5133	3182	2732
75°	4599	2565	2188
80°	3920	1854	1539
85°	3042	1033	828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6582 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	1.5
10°-20°	256.8	4.2
20°-30°	377.9	6.1
30°-40°	439.3	7.1
40°-50°	439.3	7.1
50°-60°	384.2	6.2
60°-70°	285.2	4.6
70°-80°	161.8	2.6
80°-90°	49.2	0.8
90°-100°	86.6	1.4
100°-110°	259.4	4.2
110°-120°	440.6	7.1
120°-130°	581.1	9.4
130°-140°	652.7	10.6
140°-150°	641.5	10.4
150°-160°	539.5	8.7
160°-170°	359.0	5.8
170°-180°	125.7	2.0
0°-30°	725.8	11.8
0°-40°	1165.1	18.9
0°-60°	1988.6	32.2
0°-90°	2484.8	40.3
90°-120°	786.6	12.7
90°-150°	2661.9	43.1
90°-180°	3686.0	59.7
0°-180°	6171.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	967	967	967	967	967	
5°	966	963	955	963	962	92
15°	920	917	905	910	907	259
25°	833	828	817	818	814	383
35°	717	711	700	695	691	448
45°	585	580	567	559	556	451
55°	442	440	429	420	415	396
65°	300	296	288	280	277	297
75°	160	156	152	149	148	169
85°	42	42	40	40	40	45
90°	3	14	23	29	31	7
95°	62	71	78	81	81	67
105°	239	240	244	248	251	254
115°	448	448	446	445	444	442
125°	652	652	651	649	647	582
135°	842	848	848	846	842	651
145°	1022	1026	1028	1026	1023	640
155°	1171	1171	1170	1174	1170	539
165°	1275	1272	1270	1276	1272	360
175°	1326	1321	1320	1328	1320	126
180°	1328	1328	1328	1328	1328	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	967.0	967.0	967.0	967.0	967.0
2.5°	970.1	967.8	959.3	967.0	966.2
5°	966.2	963.1	954.6	963.1	961.6
7.5°	959.3	956.2	946.9	953.8	953.1
10°	949.2	946.1	936.0	942.2	940.7
12.5°	936.0	932.9	922.1	929.0	926.7
15°	919.7	916.6	905.0	909.7	907.3
17.5°	901.1	897.3	886.4	889.5	888.0
20°	880.2	876.3	864.7	867.0	865.5
22.5°	857.7	852.3	840.7	845.4	842.3
25°	833.0	827.5	816.7	817.5	814.4
27.5°	805.1	799.6	789.6	788.0	784.1
30°	777.2	771.0	760.9	757.8	753.9
32.5°	747.7	742.3	731.5	727.6	723.7
35°	716.7	711.3	700.5	695.0	691.2
37.5°	684.2	679.5	667.9	662.5	657.1
40°	652.4	646.2	634.6	626.8	623.0
42.5°	618.3	615.2	602.1	592.8	590.4
45°	585.0	579.6	567.2	558.7	556.3
47.5°	550.1	546.3	534.6	525.3	519.1
50°	514.5	511.4	500.5	489.7	485.1
52.5°	479.6	475.8	464.1	454.8	448.6
55°	442.4	440.1	429.3	420.0	415.3
57.5°	407.6	405.2	394.4	385.1	380.4
60°	371.1	367.3	357.2	350.2	346.4
62.5°	335.5	332.4	321.6	315.4	311.5
65°	299.9	296.0	288.2	280.5	276.6
67.5°	263.4	260.3	252.6	244.8	244.1
70°	230.1	224.7	218.5	212.3	210.0
72.5°	194.5	189.1	184.4	179.8	177.4
75°	159.6	155.7	151.9	148.8	148.0
77.5°	125.5	124.0	120.1	119.3	117.0
80°	95.3	93.0	91.4	89.9	89.1
82.5°	65.9	65.1	65.1	64.3	63.5
85°	41.8	41.8	40.3	40.3	39.5
87.5°	20.1	19.4	18.6	18.6	18.6
90°	3.1	14.4	22.6	28.8	30.8
92.5°	26.7	40.1	45.2	48.3	49.3
95°	61.6	70.9	78.1	81.2	81.2
97.5°	98.6	106.9	115.1	119.2	119.2
100°	143.8	148.0	157.2	159.3	159.3
102.5°	191.1	192.1	200.4	203.4	204.5
105°	239.4	240.4	244.5	247.6	250.7
107.5°	289.7	290.8	291.8	295.9	294.9
110°	341.1	343.2	342.1	340.1	343.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	394.5	394.5	392.5	392.5	392.5
115°	448.0	448.0	445.9	444.9	443.9
117.5°	498.3	498.3	497.3	494.2	491.1
120°	548.7	552.8	549.7	544.6	546.6
122.5°	601.1	602.1	601.1	598.0	592.9
125°	652.4	652.4	651.4	649.4	647.3
127.5°	698.7	701.8	699.7	697.7	696.6
130°	748.0	751.1	751.1	749.0	744.9
132.5°	798.3	800.4	799.4	797.3	796.3
135°	841.5	847.7	847.7	845.6	842.5
137.5°	889.8	892.9	894.9	891.8	892.9
140°	938.1	940.1	940.1	939.1	938.1
142.5°	982.3	984.3	983.3	983.3	983.3
145°	1022.3	1026.4	1027.5	1026.4	1023.4
147.5°	1063.4	1068.6	1067.5	1066.5	1065.5
150°	1100.4	1104.5	1104.5	1104.5	1103.5
152.5°	1135.4	1137.4	1138.4	1141.5	1138.4
155°	1171.3	1171.3	1170.3	1174.4	1170.3
157.5°	1202.1	1200.1	1200.1	1203.2	1200.1
160°	1228.9	1227.8	1226.8	1229.9	1224.7
162.5°	1253.5	1250.4	1249.4	1255.6	1250.4
165°	1275.1	1272.0	1270.0	1276.1	1272.0
167.5°	1292.6	1288.5	1288.5	1294.6	1288.5
170°	1306.9	1301.8	1302.8	1309.0	1301.8
172.5°	1317.2	1313.1	1313.1	1320.3	1313.1
175°	1326.5	1321.3	1320.3	1327.5	1320.3
177.5°	1330.6	1325.4	1325.4	1332.6	1324.4
180°	1328.5	1328.5	1328.5	1328.5	1328.5

(END OF REPORT)