

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: P1033627

Luminaire Tested: S124DIW-B575D470UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1033627
REPORT IS A COMBINATION OF REPORTS P997843 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIW-B575D470UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Wall Mount with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

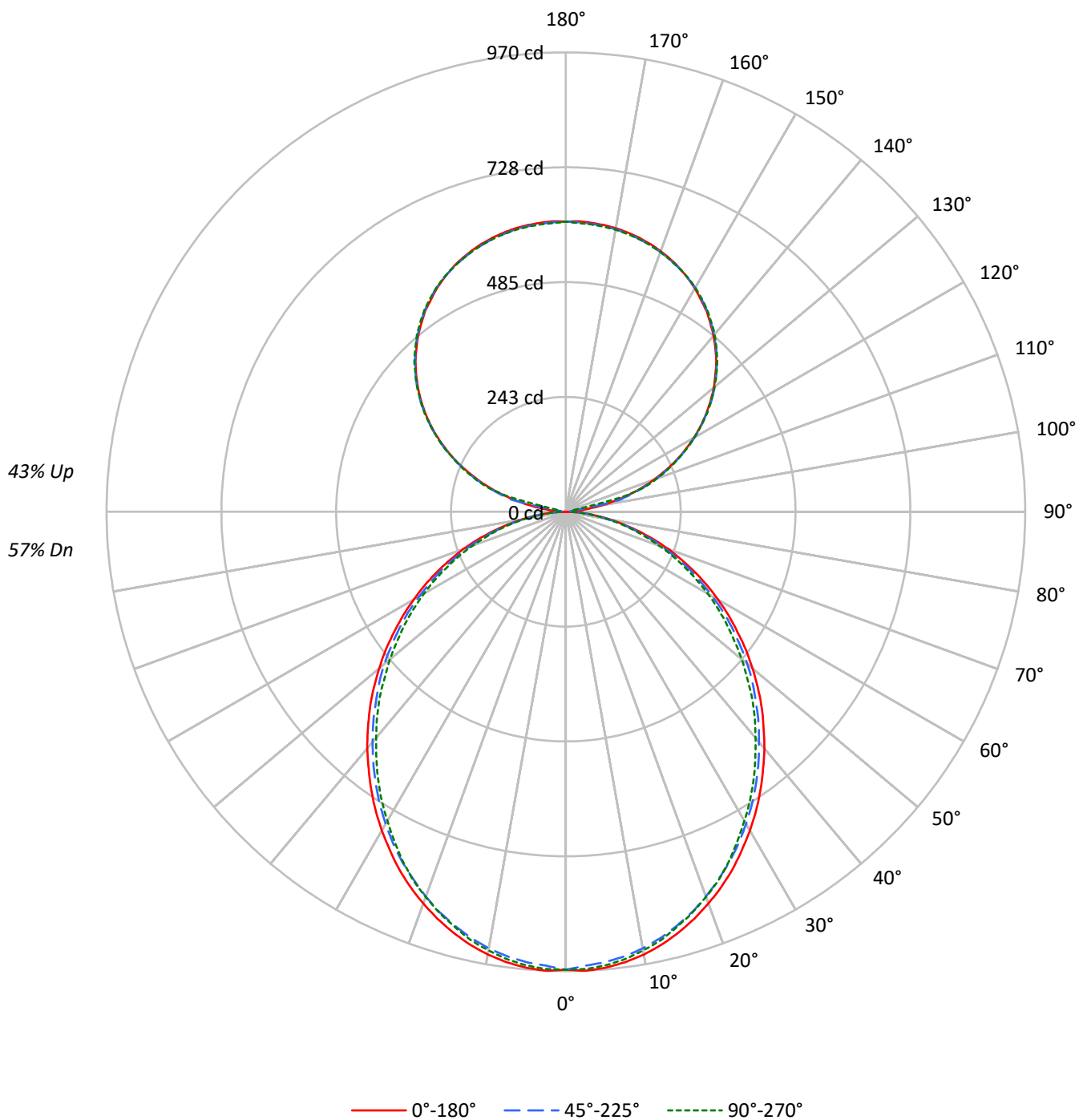
Lumens per Lamp: N/A
Luminaire Lumens: 4379.0 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 37.2
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: P1033627

CATALOG NUMBER: S124DIW-B575D470UB30-4F0-XX-W2A-F

Luminous Intensity Polar Plot



TEST NUMBER: P1033627

CATALOG NUMBER: S124DIW-B575D470UB30-4F0-XX-W2A-F

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62
1	99	95	91	87	92	88	85	82	76	74	71	65	63	62	55	54	53
2	90	83	77	71	84	77	72	67	67	63	59	57	54	52	48	46	44
3	82	73	65	59	76	68	61	56	59	54	50	51	47	44	43	40	38
4	75	64	56	50	70	60	53	48	52	47	42	45	41	37	38	35	32
5	69	57	49	43	64	54	46	41	47	41	37	41	36	32	35	31	28
6	64	52	43	37	59	48	41	36	42	36	32	37	32	28	31	28	25
7	59	47	39	33	55	44	37	31	38	33	28	33	29	25	29	25	22
8	55	42	35	29	51	40	33	28	35	29	25	31	26	22	26	23	20
9	51	39	31	26	48	36	30	25	32	27	23	28	24	20	24	21	18
10	48	36	28	23	44	34	27	22	30	24	20	26	22	18	23	19	16

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

TEST NUMBER: P1033627

CATALOG NUMBER: S124DIW-B575D470UB30-4F0-XX-W2A-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	2.1
10°-20°	256.8	5.9
20°-30°	377.9	8.6
30°-40°	439.3	10.0
40°-50°	439.3	10.0
50°-60°	384.2	8.8
60°-70°	285.2	6.5
70°-80°	161.8	3.7
80°-90°	47.6	1.1
90°-100°	20.3	0.5
100°-110°	133.9	3.1
110°-120°	255.7	5.8
120°-130°	324.6	7.4
130°-140°	347.3	7.9
140°-150°	324.8	7.4
150°-160°	261.9	6.0
160°-170°	168.9	3.9
170°-180°	58.2	1.3
0°-30°	725.8	16.6
0°-40°	1165.1	26.6
0°-60°	1988.6	45.4
0°-90°	2483.3	56.7
90°-120°	410.0	9.4
90°-150°	1406.7	32.1
90°-180°	1896.0	43.3
0°-180°	4379.0	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°	1	6	10	13	14	4
95°	25	10	10	13	13	31
105°	138	141	143	147	131	144
115°	258	259	258	259	259	253
125°	362	364	363	364	365	323
135°	449	449	450	451	452	346
145°	518	519	519	520	520	324
155°	568	568	567	569	567	262
165°	599	597	597	600	596	169
175°	613	610	610	614	609	58
180°	613	613	613	613	613	

TEST NUMBER: P1033627

CATALOG NUMBER: S124DIW-B575D470UB30-4F0-XX-W2A-F

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°	1.4	6.4	10.1	12.8	13.7
92.5°	6.9	6.0	9.6	12.4	12.4
95°	25.2	9.6	10.1	12.8	13.3
97.5°	48.1	58.2	10.1	12.4	12.8
100°	75.1	83.4	20.2	12.4	12.8
102.5°	105.4	110.9	116.4	13.3	13.3
105°	137.9	140.7	143.0	147.1	130.6
107.5°	167.7	169.1	172.3	174.6	176.4
110°	198.0	199.3	202.1	203.0	204.4



TEST NUMBER: P1033627

CATALOG NUMBER: S124DIW-B575D470UB30-4F0-XX-W2A-F

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	227.3	230.0	230.9	230.5	232.3
115°	257.5	258.9	258.4	259.4	259.4
117.5°	284.6	286.4	287.8	287.3	287.3
120°	312.0	313.9	313.4	314.3	313.4
122.5°	337.7	338.6	339.5	340.0	339.1
125°	362.0	363.8	362.9	364.3	364.7
127.5°	385.4	385.8	388.1	387.7	387.2
130°	407.8	408.3	409.7	410.1	410.1
132.5°	428.4	429.4	431.2	431.6	431.2
135°	449.1	448.6	450.4	451.3	452.3
137.5°	467.4	467.4	469.7	470.6	470.1
140°	485.3	486.2	487.1	488.5	488.9
142.5°	501.3	503.1	503.6	504.5	504.5
145°	517.8	519.2	519.2	519.6	520.5
147.5°	530.6	533.4	532.9	533.4	533.8
150°	544.8	546.7	546.2	546.2	546.7
152.5°	556.7	558.1	557.2	558.1	557.7
155°	567.7	568.2	566.8	568.7	567.3
157.5°	577.4	577.4	575.5	577.8	575.5
160°	585.6	584.2	583.8	586.5	583.8
162.5°	592.9	591.1	590.6	593.4	590.2
165°	598.9	596.6	596.6	600.3	596.1
167.5°	603.9	601.6	601.2	605.3	600.7
170°	608.1	605.3	605.8	609.4	604.9
172.5°	610.8	608.1	608.5	612.2	607.1
175°	612.6	609.9	610.4	614.5	609.0
177.5°	614.0	610.8	611.7	615.4	609.9
180°	612.6	612.6	612.6	612.6	612.6

(END OF REPORT)