

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: P1025658

Luminaire Tested: S124DIP-B575D590UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025658
REPORT IS A COMBINATION OF REPORTS P996258 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B575D590UB50-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

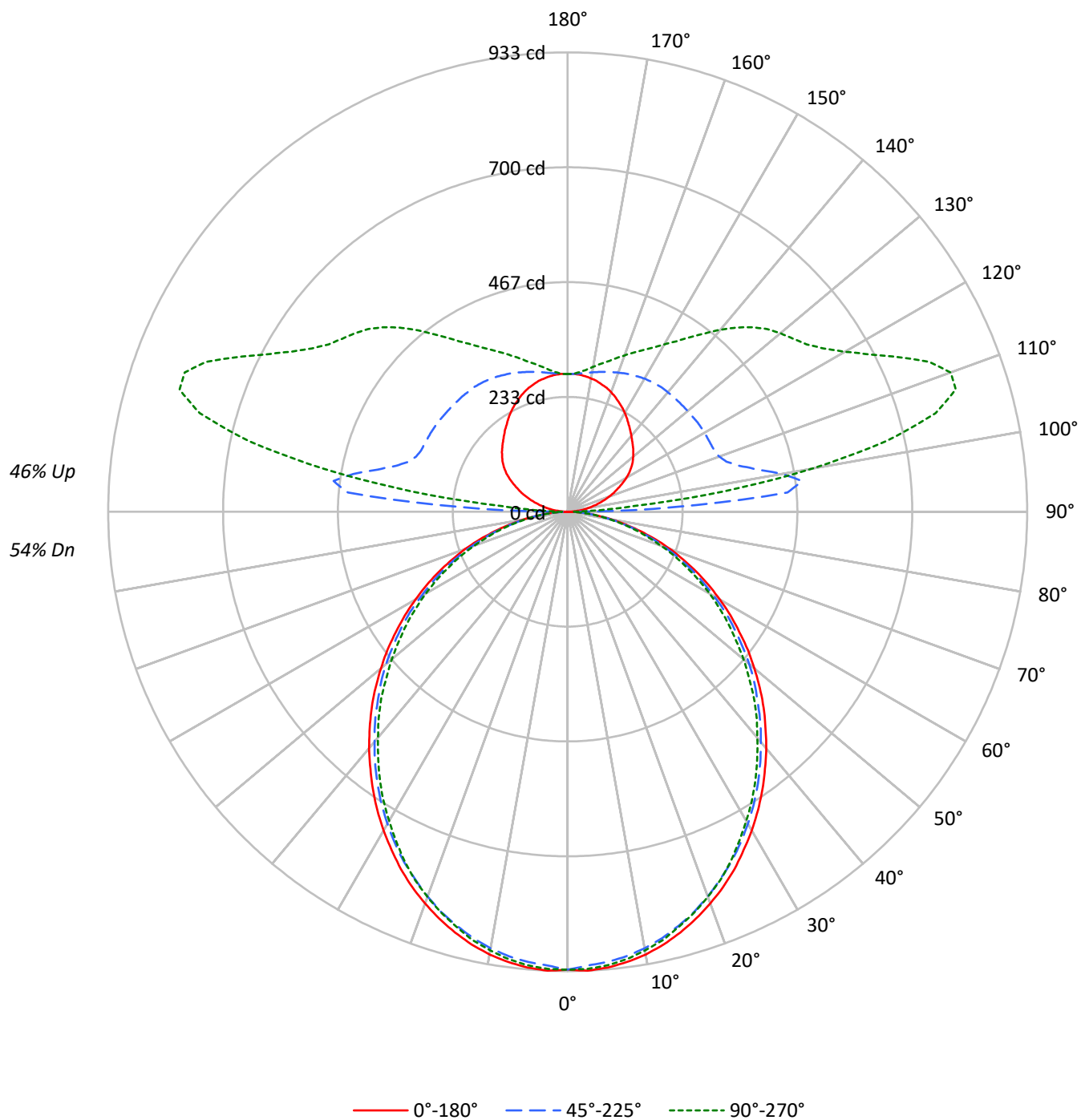
Lumens per Lamp: N/A
Luminaire Lumens: 4430.1 lumens
Efficiency: N/A
Efficacy: 112.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 39.4
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: P1025658

CATALOG NUMBER: S124DIP-B575D590UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P1025658

CATALOG NUMBER: S124DIP-B575D590UB50-4F0-XX-W2A-F4

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60
1	99	94	90	87	91	88	84	81	75	72	70	63	62	60	53	52	50
2	90	82	76	71	83	77	71	67	66	62	58	56	53	50	46	44	42
3	82	72	65	59	76	67	61	56	58	53	49	49	45	42	41	38	36
4	75	64	56	50	69	60	53	47	51	46	42	44	40	36	37	34	31
5	69	57	49	43	64	53	46	41	46	40	36	39	35	31	33	30	27
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24
7	59	46	38	33	54	43	36	31	38	32	28	32	28	24	27	24	21
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	25	22	19
9	51	38	31	26	47	36	29	25	32	26	22	27	23	20	23	20	17
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7584	7584	7584
5°	7589	7366	7375
10°	7526	7161	7111
15°	7417	6918	6813
20°	7280	6655	6506
25°	7125	6377	6174
30°	6937	6077	5811
35°	6744	5769	5459
40°	6541	5438	5085
45°	6330	5106	4735
50°	6095	4785	4348
55°	5841	4408	3963
60°	5579	3997	3563
65°	5282	3572	3111
70°	4937	3059	2627
75°	4424	2467	2104
80°	3771	1783	1480
85°	2925	992	797

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6330 cd/sqm

TEST NUMBER: P1025658

CATALOG NUMBER: S124DIP-B575D590UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.7	2.0
10°-20°	247.0	5.6
20°-30°	363.4	8.2
30°-40°	422.5	9.5
40°-50°	422.5	9.5
50°-60°	369.5	8.3
60°-70°	274.3	6.2
70°-80°	155.6	3.5
80°-90°	45.6	1.0
90°-100°	207.8	4.7
100°-110°	422.7	9.5
110°-120°	376.8	8.5
120°-130°	316.5	7.1
130°-140°	264.1	6.0
140°-150°	201.7	4.6
150°-160°	141.8	3.2
160°-170°	83.4	1.9
170°-180°	27.1	0.6
0°-30°	698.1	15.8
0°-40°	1120.5	25.3
0°-60°	1912.5	43.2
0°-90°	2388.1	53.9
90°-120°	1007.4	22.7
90°-150°	1789.7	40.4
90°-180°	2042.0	46.1
0°-180°	4430.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	930	930	930	930	930	
5°	929	926	918	926	925	88
15°	884	882	870	875	873	249
25°	801	796	785	786	783	369
35°	689	684	674	668	665	431
45°	563	557	546	537	535	434
55°	426	423	413	404	399	381
65°	288	285	277	270	266	285
75°	154	150	146	143	142	163
85°	40	40	39	39	38	43
90°	0	4	10	11	12	4
95°	18	57	448	222	134	20
105°	64	93	361	776	774	69
115°	113	142	322	618	743	112
125°	158	187	320	526	593	141
135°	188	223	317	467	530	145
145°	216	247	316	394	433	136
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

TEST NUMBER: P1025658

CATALOG NUMBER: S124DIP-B575D590UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	930.0	930.0	930.0	930.0	930.0
2.5°	933.0	930.7	922.5	930.0	929.2
5°	929.2	926.3	918.1	926.3	924.8
7.5°	922.5	919.6	910.6	917.3	916.6
10°	912.9	909.9	900.2	906.1	904.7
12.5°	900.2	897.2	886.8	893.5	891.2
15°	884.5	881.6	870.4	874.8	872.6
17.5°	866.6	862.9	852.5	855.5	854.0
20°	846.5	842.8	831.6	833.9	832.4
22.5°	824.9	819.7	808.5	813.0	810.0
25°	801.1	795.9	785.4	786.2	783.2
27.5°	774.2	769.0	759.3	757.9	754.1
30°	747.4	741.5	731.8	728.8	725.1
32.5°	719.1	713.9	703.5	699.7	696.0
35°	689.3	684.1	673.6	668.4	664.7
37.5°	658.0	653.5	642.3	637.1	631.9
40°	627.4	621.5	610.3	602.9	599.1
42.5°	594.7	591.7	579.0	570.1	567.8
45°	562.6	557.4	545.5	537.3	535.0
47.5°	529.1	525.4	514.2	505.2	499.3
50°	494.8	491.8	481.4	471.0	466.5
52.5°	461.3	457.5	446.4	437.4	431.5
55°	425.5	423.3	412.8	403.9	399.4
57.5°	392.0	389.7	379.3	370.4	365.9
60°	356.9	353.2	343.5	336.8	333.1
62.5°	322.7	319.7	309.3	303.3	299.6
65°	288.4	284.7	277.2	269.8	266.0
67.5°	253.4	250.4	242.9	235.5	234.7
70°	221.3	216.1	210.1	204.2	201.9
72.5°	187.0	181.8	177.4	172.9	170.6
75°	153.5	149.8	146.1	143.1	142.3
77.5°	120.7	119.2	115.5	114.8	112.5
80°	91.7	89.4	87.9	86.4	85.7
82.5°	63.3	62.6	62.6	61.9	61.1
85°	40.2	40.2	38.7	38.7	38.0
87.5°	19.4	18.6	17.9	17.9	17.9
90°	0.5	4.4	9.9	11.0	11.5
92.5°	7.7	42.4	215.5	71.2	50.0
95°	18.1	57.2	448.0	221.8	134.1
97.5°	30.2	63.2	479.4	453.0	322.1
100°	41.8	71.5	442.0	626.6	504.1
102.5°	52.8	81.4	395.2	735.5	662.4
105°	64.3	93.2	360.6	776.4	773.5
107.5°	77.0	105.2	338.1	764.1	826.2
110°	89.6	117.4	327.6	720.2	827.3

TEST NUMBER: P1025658

CATALOG NUMBER: S124DIP-B575D590UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	101.7	129.4	322.7	666.2	794.9
115°	113.2	142.1	321.6	617.9	742.7
117.5°	125.3	153.9	321.0	580.0	691.5
120°	137.4	165.5	321.0	554.4	649.8
122.5°	148.4	176.8	320.5	537.6	616.8
125°	157.8	187.4	319.9	525.8	592.6
127.5°	166.6	197.4	318.8	514.5	577.2
130°	173.7	207.0	318.3	501.0	564.0
132.5°	180.9	215.2	317.7	485.2	549.2
135°	187.5	223.2	317.2	466.8	529.9
137.5°	194.1	230.0	317.2	447.0	507.4
140°	201.2	236.4	316.6	427.6	482.7
142.5°	208.9	242.2	316.6	409.8	456.3
145°	216.0	247.4	315.5	393.6	432.6
147.5°	224.3	252.3	313.9	380.2	410.6
150°	232.0	257.0	312.2	367.8	392.5
152.5°	239.1	261.4	309.5	357.4	376.0
155°	245.7	265.2	306.7	347.4	362.3
157.5°	252.3	268.8	304.0	338.0	349.6
160°	258.4	271.8	300.7	328.7	338.1
162.5°	263.9	274.3	297.4	319.6	327.1
165°	267.7	276.0	294.1	311.4	316.1
167.5°	272.1	277.4	290.8	304.2	307.3
170°	274.9	278.5	287.5	297.1	299.0
172.5°	277.6	279.2	284.2	290.8	290.8
175°	279.3	279.8	282.0	285.9	284.8
177.5°	280.4	279.8	280.4	282.3	280.4
180°	279.8	279.8	279.8	279.8	279.8

(END OF REPORT)