

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: P1026491

Luminaire Tested: S124RDIP-B575D590UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026491
REPORT IS A COMBINATION OF REPORTS P999571 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B575D590UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

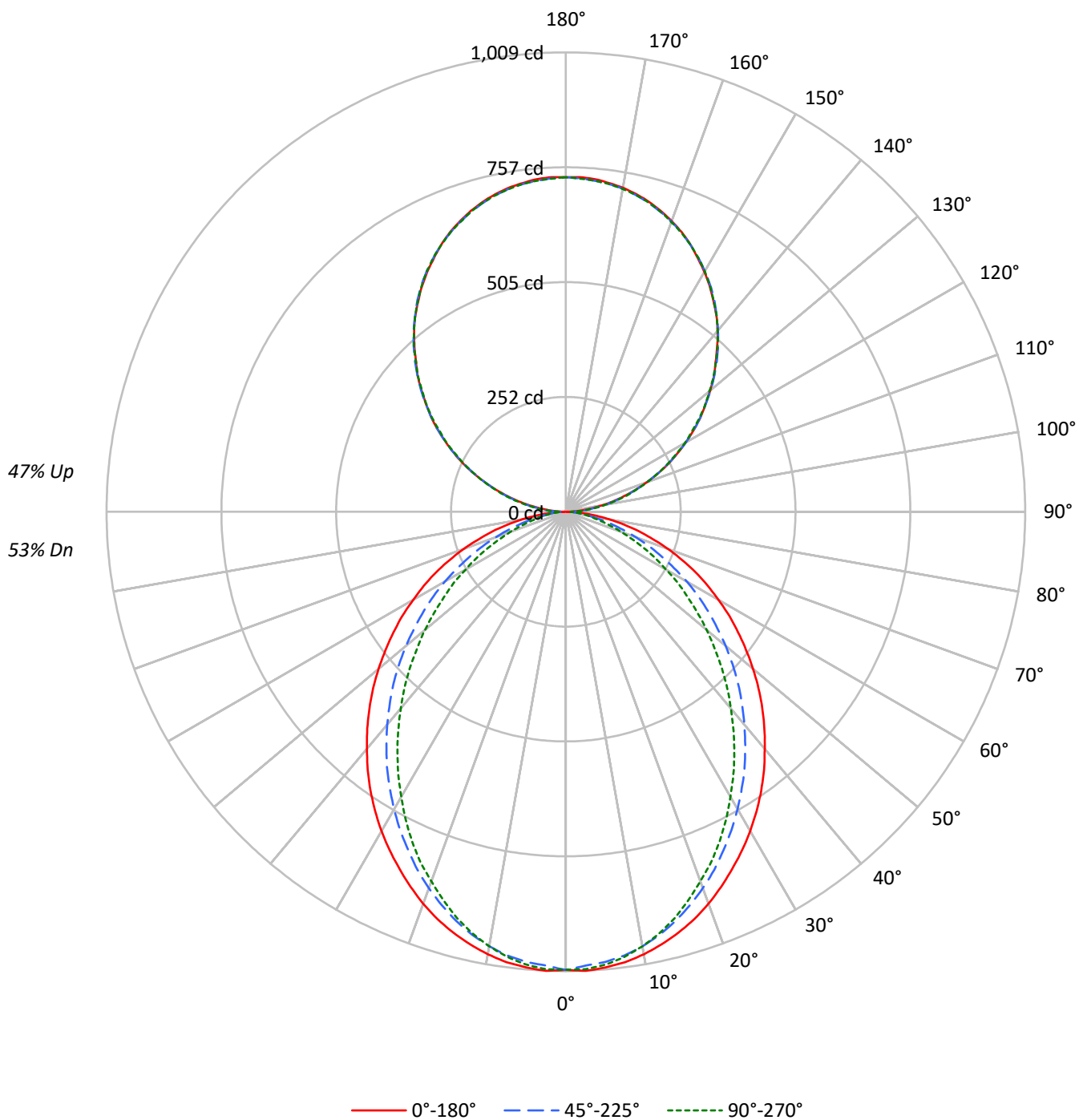
Lumens per Lamp: N/A
Luminaire Lumens: 4365.0 lumens
Efficiency: N/A
Efficacy: 110.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	59	59	59
1	99	95	91	87	91	88	85	82	75	73	71	63	62	60	53	52	51
2	90	83	77	72	83	77	72	67	66	62	59	56	53	51	47	45	43
3	82	73	66	60	76	68	62	57	59	54	50	50	46	43	42	39	37
4	76	65	57	51	70	61	54	48	52	47	43	45	41	37	37	34	32
5	69	58	50	44	64	54	47	42	47	41	37	40	36	32	34	31	28
6	64	52	44	38	59	49	42	36	42	37	32	36	32	29	31	27	25
7	59	47	39	34	55	44	37	32	38	33	29	33	29	25	28	25	22
8	55	43	35	30	51	40	33	28	35	30	26	30	26	23	26	22	20
9	51	39	32	27	48	37	30	25	32	27	23	28	24	20	24	21	18
10	48	36	29	24	45	34	27	23	30	24	21	26	22	19	22	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8205	8205	8205
5°	8206	7962	7962
10°	8137	7710	7618
15°	8025	7397	7213
20°	7878	7041	6750
25°	7695	6656	6299
30°	7517	6264	5792
35°	7319	5865	5296
40°	7086	5437	4787
45°	6865	5013	4283
50°	6615	4549	3770
55°	6346	4073	3242
60°	6046	3567	2720
65°	5758	2988	2216
70°	5345	2378	1694
75°	4818	1731	1184
80°	4022	1063	852
85°	3027	612	467

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 6865 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.6	2.2
10°-20°	263.8	6.0
20°-30°	380.9	8.7
30°-40°	431.7	9.9
40°-50°	416.8	9.5
50°-60°	346.5	7.9
60°-70°	239.2	5.5
70°-80°	120.8	2.8
80°-90°	32.3	0.7
90°-100°	47.9	1.1
100°-110°	143.4	3.3
110°-120°	243.7	5.6
120°-130°	321.4	7.4
130°-140°	360.9	8.3
140°-150°	354.8	8.1
150°-160°	298.4	6.8
160°-170°	198.5	4.5
170°-180°	69.5	1.6
0°-30°	739.3	16.9
0°-40°	1171.0	26.8
0°-60°	1934.3	44.3
0°-90°	2326.6	53.3
90°-120°	435.0	10.0
90°-150°	1472.0	33.7
90°-180°	2038.0	46.7
0°-180°	4365.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1005	1002	992	1000	998	95
15°	957	950	931	929	924	270
25°	865	851	820	807	799	399
35°	748	724	685	659	645	468
45°	610	582	536	498	484	471
55°	462	432	381	341	327	414
65°	314	281	232	199	190	310
75°	167	139	102	85	80	176
85°	42	26	24	22	22	46
90°	2	8	12	16	17	5
95°	34	39	43	45	45	37
105°	132	133	135	137	139	140
115°	248	248	247	246	246	244
125°	361	361	360	359	358	322
135°	465	469	469	468	466	360
145°	565	568	568	568	566	354
155°	648	648	647	649	647	298
165°	705	703	702	706	703	199
175°	734	731	730	734	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1006.2	1006.2	1006.2	1006.2	1006.2
2.5°	1009.3	1006.2	997.8	1006.2	1005.5
5°	1004.7	1001.6	992.4	1000.1	998.5
7.5°	997.8	994.7	983.1	988.5	986.2
10°	987.0	983.1	969.2	972.3	969.2
12.5°	973.1	968.5	951.5	953.1	948.4
15°	956.9	950.0	930.7	929.2	923.8
17.5°	938.4	928.4	906.1	902.2	894.5
20°	916.1	906.1	879.9	873.7	863.7
22.5°	891.4	879.9	851.4	841.3	833.6
25°	865.2	851.4	819.8	806.7	799.0
27.5°	838.3	821.3	788.2	772.8	762.0
30°	809.8	790.5	754.3	735.0	722.7
32.5°	779.7	757.4	719.6	696.5	684.9
35°	748.1	723.5	684.9	658.7	644.9
37.5°	715.0	689.6	647.2	618.7	604.8
40°	679.6	654.1	610.2	577.8	564.0
42.5°	645.7	618.7	572.5	539.3	524.7
45°	610.2	581.7	535.5	497.7	483.9
47.5°	574.0	544.7	497.0	457.7	442.2
50°	537.0	507.0	457.7	419.1	404.5
52.5°	499.3	470.0	419.1	379.8	364.4
55°	462.3	431.5	381.4	341.3	326.7
57.5°	426.1	393.7	344.4	303.6	292.8
60°	386.8	356.0	306.6	266.6	254.3
62.5°	351.3	319.0	268.1	231.9	222.7
65°	314.4	281.2	231.9	198.8	189.5
67.5°	275.8	244.2	198.0	168.7	157.9
70°	239.6	207.3	163.3	137.9	130.2
72.5°	201.1	172.6	131.7	110.9	104.0
75°	167.2	138.7	102.5	84.8	80.1
77.5°	131.7	107.1	76.3	63.9	62.4
80°	97.8	75.5	52.4	50.1	49.3
82.5°	68.6	48.5	37.8	36.2	35.4
85°	41.6	26.2	23.9	22.3	22.3
87.5°	17.7	11.6	10.8	10.0	10.8
90°	1.7	8.0	12.5	15.9	17.0
92.5°	14.8	22.2	25.0	26.7	27.3
95°	34.1	39.2	43.2	44.9	44.9
97.5°	54.5	59.1	63.6	65.9	65.9
100°	79.5	81.8	86.9	88.1	88.1
102.5°	105.7	106.3	110.8	112.5	113.1
105°	132.4	133.0	135.2	136.9	138.6
107.5°	160.2	160.8	161.4	163.6	163.1
110°	188.6	189.8	189.2	188.1	189.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	218.2	218.2	217.0	217.0	217.0
115°	247.7	247.7	246.6	246.0	245.5
117.5°	275.6	275.6	275.0	273.3	271.6
120°	303.4	305.7	304.0	301.1	302.3
122.5°	332.4	333.0	332.4	330.7	327.8
125°	360.8	360.8	360.2	359.1	358.0
127.5°	386.4	388.1	386.9	385.8	385.2
130°	413.6	415.3	415.3	414.2	411.9
132.5°	441.5	442.6	442.0	440.9	440.3
135°	465.3	468.8	468.8	467.6	465.9
137.5°	492.1	493.8	494.9	493.2	493.8
140°	518.8	519.9	519.9	519.3	518.8
142.5°	543.2	544.3	543.8	543.8	543.8
145°	565.3	567.6	568.2	567.6	565.9
147.5°	588.1	590.9	590.3	589.8	589.2
150°	608.5	610.8	610.8	610.8	610.2
152.5°	627.8	629.0	629.6	631.3	629.6
155°	647.7	647.7	647.2	649.4	647.2
157.5°	664.8	663.6	663.6	665.3	663.6
160°	679.6	679.0	678.4	680.1	677.3
162.5°	693.2	691.5	690.9	694.3	691.5
165°	705.1	703.4	702.3	705.7	703.4
167.5°	714.8	712.5	712.5	715.9	712.5
170°	722.7	719.9	720.5	723.9	719.9
172.5°	728.4	726.1	726.1	730.1	726.1
175°	733.5	730.7	730.1	734.1	730.1
177.5°	735.8	733.0	733.0	736.9	732.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)