

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: P1026497

Luminaire Tested: S124RDIP-B575D590UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026497
REPORT IS A COMBINATION OF REPORTS P999577 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIP-B575D590UB50-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

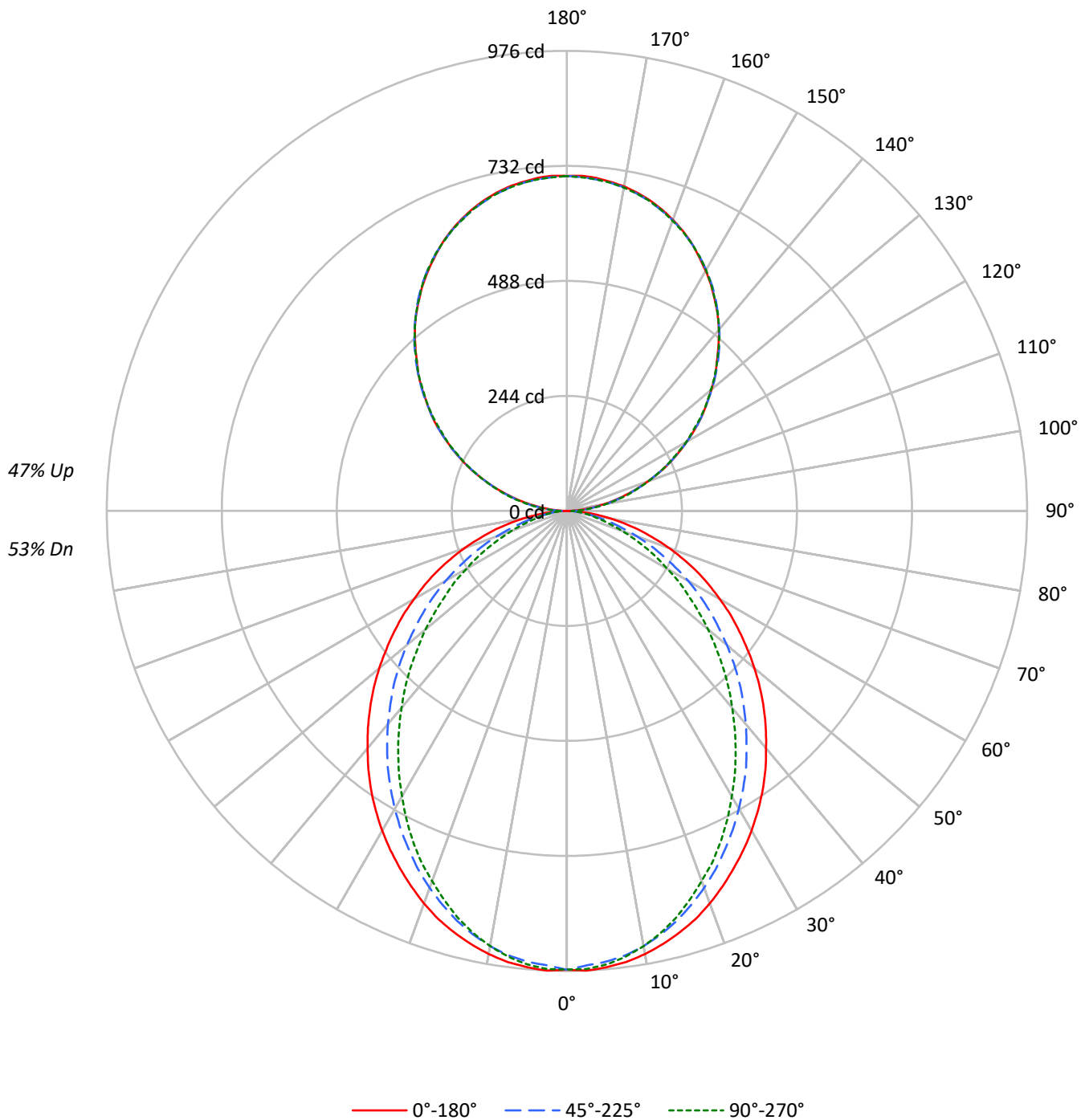
Lumens per Lamp: N/A
Luminaire Lumens: 4221.9 lumens
Efficiency: N/A
Efficacy: 107.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	7937	7937	7937
5°	7937	7701	7702
10°	7870	7459	7370
15°	7762	7156	6977
20°	7620	6811	6530
25°	7444	6439	6093
30°	7271	6059	5603
35°	7080	5674	5123
40°	6853	5260	4630
45°	6641	4849	4142
50°	6400	4400	3647
55°	6139	3940	3136
60°	5848	3451	2630
65°	5569	2890	2144
70°	5171	2301	1639
75°	4660	1674	1146
80°	3895	1028	824
85°	2925	592	453

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6641 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.5	2.2
10°-20°	255.2	6.0
20°-30°	368.4	8.7
30°-40°	417.6	9.9
40°-50°	403.2	9.5
50°-60°	335.2	7.9
60°-70°	231.3	5.5
70°-80°	116.9	2.8
80°-90°	31.2	0.7
90°-100°	46.3	1.1
100°-110°	138.7	3.3
110°-120°	235.6	5.6
120°-130°	310.8	7.4
130°-140°	349.1	8.3
140°-150°	343.1	8.1
150°-160°	288.6	6.8
160°-170°	192.0	4.5
170°-180°	67.2	1.6
0°-30°	715.2	16.9
0°-40°	1132.7	26.8
0°-60°	1871.1	44.3
0°-90°	2250.5	53.3
90°-120°	420.7	10.0
90°-150°	1423.7	33.7
90°-180°	1971.0	46.7
0°-180°	4221.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	973	973	973	973	973	
5°	972	969	960	967	966	92
15°	926	919	900	899	894	261
25°	837	824	793	780	773	386
35°	724	700	663	637	624	452
45°	590	563	518	482	468	455
55°	447	417	369	330	316	400
65°	304	272	224	192	183	300
75°	162	134	99	82	78	171
85°	40	25	23	22	22	44
90°	2	8	12	15	16	5
95°	33	38	42	43	43	36
105°	128	129	131	132	134	136
115°	240	240	238	238	237	236
125°	349	349	348	347	346	311
135°	450	453	453	452	451	348
145°	547	549	550	549	547	342
155°	626	626	626	628	626	288
165°	682	680	679	682	680	192
175°	709	707	706	710	706	67
180°	710	710	710	710	710	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	973.3	973.3	973.3	973.3	973.3
2.5°	976.3	973.3	965.1	973.3	972.6
5°	971.8	968.9	959.9	967.4	965.9
7.5°	965.1	962.2	951.0	956.2	954.0
10°	954.7	951.0	937.6	940.5	937.6
12.5°	941.3	936.8	920.4	921.9	917.4
15°	925.6	918.9	900.3	898.8	893.6
17.5°	907.8	898.1	876.5	872.7	865.3
20°	886.1	876.5	851.1	845.1	835.5
22.5°	862.3	851.1	823.5	813.8	806.4
25°	837.0	823.5	793.0	780.3	772.9
27.5°	810.9	794.5	762.4	747.5	737.1
30°	783.3	764.7	729.6	711.0	699.1
32.5°	754.2	732.6	696.1	673.7	662.6
35°	723.7	699.8	662.6	637.2	623.8
37.5°	691.6	667.0	626.0	598.5	585.0
40°	657.3	632.7	590.3	559.0	545.5
42.5°	624.5	598.5	553.7	521.7	507.5
45°	590.3	562.7	518.0	481.5	468.0
47.5°	555.2	526.9	480.7	442.7	427.8
50°	519.5	490.4	442.7	405.4	391.3
52.5°	482.9	454.6	405.4	367.4	352.5
55°	447.2	417.4	368.9	330.2	316.0
57.5°	412.1	380.8	333.1	293.6	283.2
60°	374.1	344.3	296.6	257.9	245.9
62.5°	339.8	308.5	259.4	224.3	215.4
65°	304.1	272.0	224.3	192.3	183.3
67.5°	266.8	236.3	191.5	163.2	152.8
70°	231.8	200.5	158.0	133.4	126.0
72.5°	194.5	166.9	127.4	107.3	100.6
75°	161.7	134.2	99.1	82.0	77.5
77.5°	127.4	103.6	73.8	61.9	60.4
80°	94.7	73.0	50.7	48.4	47.7
82.5°	66.3	47.0	36.5	35.0	34.3
85°	40.2	25.3	23.1	21.6	21.6
87.5°	17.1	11.2	10.4	9.7	10.4
90°	1.6	7.7	12.1	15.4	16.5
92.5°	14.3	21.4	24.2	25.8	26.4
95°	33.0	37.9	41.8	43.4	43.4
97.5°	52.8	57.2	61.5	63.7	63.7
100°	76.9	79.1	84.1	85.2	85.2
102.5°	102.2	102.8	107.2	108.8	109.4
105°	128.0	128.6	130.8	132.4	134.1
107.5°	155.0	155.5	156.1	158.3	157.7
110°	182.4	183.5	183.0	181.9	183.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.0	211.0	209.9	209.9	209.9
115°	239.6	239.6	238.5	237.9	237.4
117.5°	266.5	266.5	266.0	264.3	262.7
120°	293.4	295.6	294.0	291.2	292.3
122.5°	321.5	322.0	321.5	319.8	317.1
125°	348.9	348.9	348.4	347.3	346.2
127.5°	373.7	375.3	374.2	373.1	372.6
130°	400.1	401.7	401.7	400.6	398.4
132.5°	427.0	428.1	427.5	426.4	425.9
135°	450.1	453.4	453.4	452.3	450.6
137.5°	475.9	477.5	478.6	477.0	477.5
140°	501.7	502.8	502.8	502.3	501.7
142.5°	525.3	526.4	525.9	525.9	525.9
145°	546.8	549.0	549.5	549.0	547.3
147.5°	568.8	571.5	571.0	570.4	569.9
150°	588.5	590.7	590.7	590.7	590.2
152.5°	607.2	608.3	608.9	610.5	608.9
155°	626.5	626.5	625.9	628.1	625.9
157.5°	642.9	641.8	641.8	643.5	641.8
160°	657.2	656.7	656.1	657.8	655.0
162.5°	670.4	668.8	668.2	671.5	668.8
165°	682.0	680.3	679.2	682.5	680.3
167.5°	691.3	689.1	689.1	692.4	689.1
170°	699.0	696.3	696.8	700.1	696.3
172.5°	704.5	702.3	702.3	706.1	702.3
175°	709.4	706.7	706.1	710.0	706.1
177.5°	711.6	708.9	708.9	712.7	708.3
180°	710.5	710.5	710.5	710.5	710.5

(END OF REPORT)