

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: P1026498

Luminaire Tested: S124RDIP-B575D590UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1026498
REPORT IS A COMBINATION OF REPORTS P999578 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-F4
Description: Define 4 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

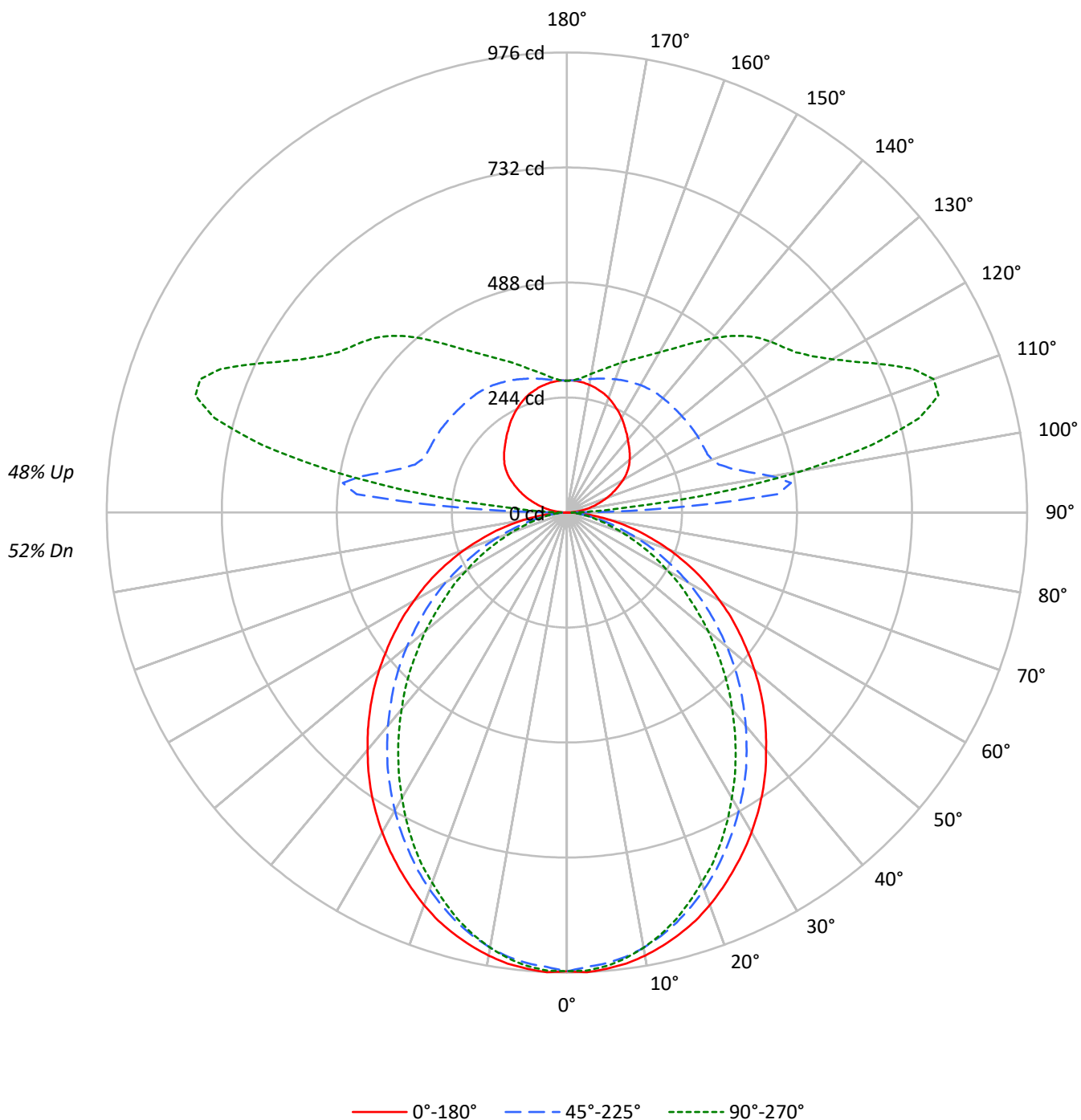
Lumens per Lamp: N/A
Luminaire Lumens: 4292.0 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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	71	71	71	58	58	58
1	99	94	91	87	91	88	84	81	75	72	70	63	61	60	52	51	50
2	90	83	77	72	83	77	72	67	66	62	59	56	53	50	46	44	42
3	82	73	66	60	76	68	62	56	58	53	50	49	46	43	41	39	36
4	75	65	57	51	70	60	53	48	52	47	42	44	40	37	37	34	32
5	69	58	50	44	64	54	47	41	47	41	37	40	35	32	33	30	28
6	64	52	44	38	59	49	41	36	42	36	32	36	32	28	30	27	24
7	59	47	39	34	55	44	37	32	38	33	28	33	28	25	28	24	22
8	55	43	35	30	51	40	33	28	35	29	25	30	26	22	26	22	20
9	51	39	32	27	47	37	30	25	32	27	23	28	23	20	24	20	18
10	48	36	29	24	44	34	27	23	30	24	21	26	21	18	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	2.1
10°-20°	255.2	5.9
20°-30°	368.4	8.6
30°-40°	417.6	9.7
40°-50°	403.2	9.4
50°-60°	335.2	7.8
60°-70°	231.3	5.4
70°-80°	116.9	2.7
80°-90°	30.7	0.7
90°-100°	207.8	4.8
100°-110°	422.7	9.8
110°-120°	376.8	8.8
120°-130°	316.5	7.4
130°-140°	264.1	6.2
140°-150°	201.7	4.7
150°-160°	141.8	3.3
160°-170°	83.4	1.9
170°-180°	27.1	0.6
0°-30°	715.2	16.7
0°-40°	1132.7	26.4
0°-60°	1871.1	43.6
0°-90°	2250.0	52.4
90°-120°	1007.4	23.5
90°-150°	1789.7	41.7
90°-180°	2042.0	47.6
0°-180°	4292.0	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°	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	

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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°	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

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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)