

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: P1025429

Luminaire Tested: S124DIP-B350D590UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025429
REPORT IS A COMBINATION OF REPORTS P995954 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB50-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

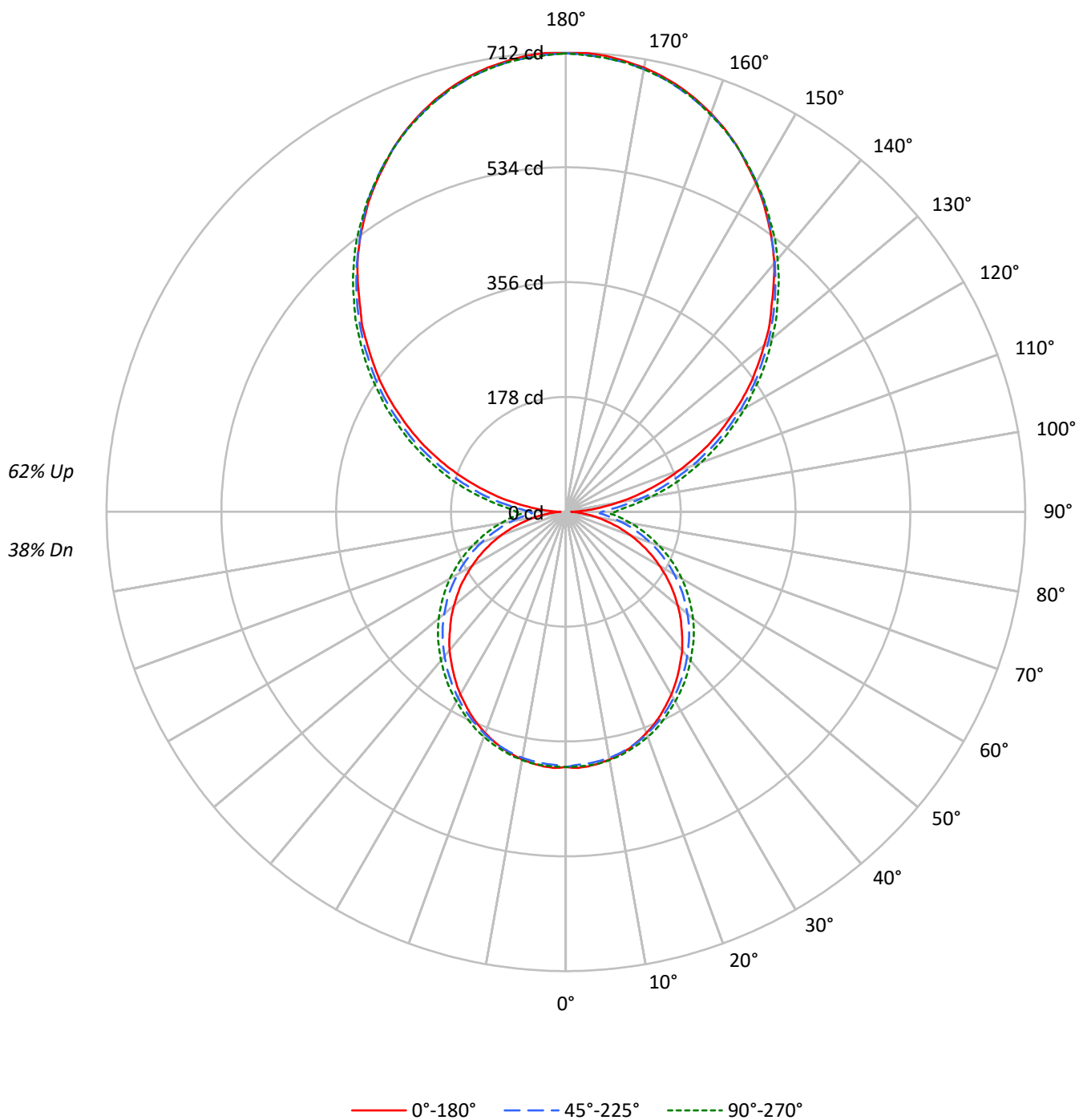
Lumens per Lamp: N/A
Luminaire Lumens: 3322.0 lumens
Efficiency: N/A
Efficacy: 117.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
Input Voltage (V):
Input Current (A_{in}): 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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38		
1	94	90	86	82	85	81	78	75	66	63	61	51	50	48	38	37	36	30		
2	85	78	71	66	77	71	65	61	57	53	50	45	42	40	33	31	30	25		
3	78	68	61	55	70	62	55	50	50	45	42	39	36	33	29	27	25	20		
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17		
5	65	53	45	39	59	48	41	36	39	34	30	31	27	24	23	21	18	15		
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	43	35	29	50	39	32	27	32	27	23	25	21	18	19	16	14	11		
8	51	39	31	26	46	35	29	24	29	24	20	23	19	16	17	15	13	10		
9	47	35	28	23	43	32	26	21	27	21	18	21	17	15	16	13	11	9		
10	44	32	25	20	40	30	23	19	24	19	16	20	16	13	15	12	10	8		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3227	3227	3227
5°	3235	3143	3148
10°	3214	3081	3072
15°	3184	3011	2986
20°	3140	2936	2902
25°	3090	2853	2812
30°	3035	2770	2720
35°	2974	2686	2638
40°	2925	2605	2554
45°	2851	2530	2478
50°	2789	2444	2399
55°	2725	2361	2308
60°	2625	2258	2222
65°	2516	2147	2119
70°	2383	2020	2000
75°	2196	1878	1887
80°	1987	1734	1769
85°	1710	1589	1673

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2851 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.5	1.1
10°-20°	107.4	3.2
20°-30°	162.4	4.9
30°-40°	196.5	5.9
40°-50°	207.7	6.3
50°-60°	195.5	5.9
60°-70°	162.2	4.9
70°-80°	113.8	3.4
80°-90°	65.7	2.0
90°-100°	84.5	2.5
100°-110°	167.0	5.0
110°-120°	254.6	7.7
120°-130°	321.5	9.7
130°-140°	353.7	10.6
140°-150°	344.0	10.4
150°-160°	288.6	8.7
160°-170°	192.0	5.8
170°-180°	67.2	2.0
0°-30°	307.3	9.3
0°-40°	503.8	15.2
0°-60°	907.0	27.3
0°-90°	1248.8	37.6
90°-120°	506.2	15.2
90°-150°	1525.4	45.9
90°-180°	2073.0	62.4
0°-180°	3322.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	396	396	396	396	396	
5°	396	395	392	395	395	38
15°	380	380	379	383	382	107
25°	347	350	351	356	357	160
35°	304	309	314	320	321	190
45°	253	262	270	278	280	196
55°	198	208	221	230	233	177
65°	137	152	167	178	181	136
75°	76	93	111	124	128	81
85°	24	42	62	75	80	24
90°	9	32	56	72	77	7
95°	39	58	80	94	98	40
105°	132	141	160	173	178	140
115°	242	246	259	268	271	239
125°	351	350	361	368	370	313
135°	451	454	457	463	464	349
145°	547	549	550	552	552	343
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°	395.7	395.7	395.7	395.7	395.7
2.5°	397.4	396.1	392.6	395.7	395.2
5°	396.1	394.8	391.7	395.2	394.8
7.5°	393.5	392.6	389.9	393.9	393.5
10°	389.9	389.5	387.3	391.2	390.8
12.5°	385.0	385.0	383.7	387.3	387.3
15°	379.7	380.2	378.8	382.8	382.4
17.5°	372.6	374.0	373.5	377.5	377.1
20°	365.1	366.4	366.9	371.3	371.3
22.5°	356.7	358.5	359.3	363.8	364.7
25°	347.4	350.0	351.4	356.2	356.7
27.5°	337.2	341.2	342.9	347.4	347.8
30°	327.0	330.5	333.6	338.5	339.4
32.5°	315.9	320.3	323.9	329.7	330.5
35°	304.0	309.3	313.7	319.9	321.2
37.5°	292.0	298.2	303.5	309.7	311.0
40°	280.5	286.2	292.4	299.1	300.9
42.5°	267.2	273.8	281.4	288.9	290.2
45°	253.4	261.9	270.3	277.8	280.0
47.5°	240.6	249.0	258.8	266.3	268.9
50°	226.4	236.2	245.9	254.8	257.4
52.5°	212.2	222.0	233.5	242.4	245.0
55°	198.5	207.8	221.1	230.0	232.6
57.5°	183.0	194.5	207.4	218.0	220.2
60°	167.9	179.4	194.1	204.3	207.8
62.5°	153.3	166.2	180.8	191.0	194.5
65°	137.4	151.5	166.6	177.7	181.2
67.5°	122.3	137.4	153.3	164.4	167.9
70°	106.8	121.8	138.7	150.6	153.7
72.5°	91.7	107.2	125.4	136.9	140.5
75°	76.2	92.6	111.2	123.6	127.6
77.5°	61.6	78.9	98.4	110.8	115.2
80°	48.3	66.0	85.5	98.8	102.4
82.5°	35.0	53.6	73.1	86.8	90.8
85°	23.5	42.1	62.0	75.3	79.8
87.5°	14.6	32.8	52.3	65.1	69.1
90°	8.7	32.5	56.0	72.1	76.8
92.5°	20.9	43.6	65.4	79.4	83.6
95°	38.8	58.3	80.3	93.9	97.9
97.5°	58.1	75.4	97.8	111.6	115.5
100°	81.8	95.5	117.8	130.8	133.9
102.5°	107.1	117.4	138.7	151.8	155.9
105°	132.0	141.4	160.0	172.7	178.0
107.5°	159.0	167.0	183.1	196.4	198.9
110°	185.9	193.2	208.3	217.3	222.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.1	219.4	232.9	242.7	246.2
115°	242.3	246.2	259.3	268.5	271.1
117.5°	269.2	271.8	284.6	292.2	294.2
120°	295.6	299.1	310.4	316.5	321.1
122.5°	323.7	324.2	335.7	342.8	343.2
125°	350.7	350.2	360.8	368.1	369.7
127.5°	375.5	376.6	384.4	391.3	393.9
130°	401.4	402.6	409.7	416.6	417.0
132.5°	428.3	429.0	433.7	440.1	442.3
135°	451.0	454.3	457.4	463.4	464.3
137.5°	476.8	477.9	480.8	485.9	488.6
140°	502.6	503.2	503.7	508.9	510.6
142.5°	525.7	526.8	525.9	530.8	532.5
145°	547.2	549.0	549.5	551.7	551.7
147.5°	569.2	571.5	571.0	570.8	572.1
150°	588.9	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)