

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: P1025438

Luminaire Tested: S124DIP-B350D810UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025438
REPORT IS A COMBINATION OF REPORTS P995963 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

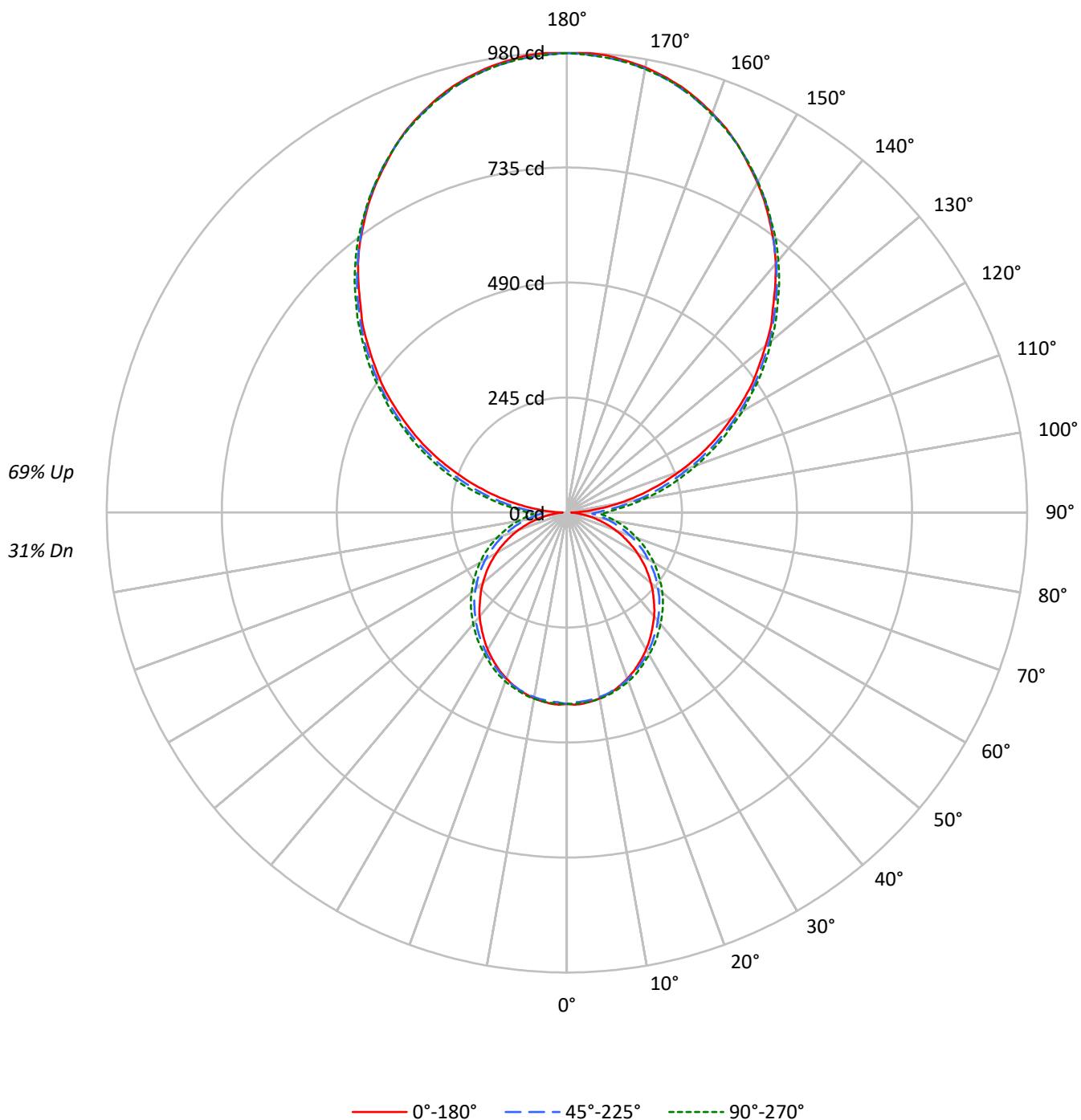
Lumens per Lamp: N/A
Luminaire Lumens: 4109.0 lumens
Efficiency: N/A
Efficacy: 120.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	39	39	31
1	93	88	84	81	83	80	76	73	63	61	58	48	46	45	33	32	32	32	32	25
2	84	77	71	65	75	69	64	59	55	51	48	41	39	37	29	27	26	26	26	20
3	77	67	60	54	69	61	54	49	48	43	40	36	33	31	25	24	22	22	22	17
4	70	59	51	45	63	53	47	41	42	37	34	32	29	26	23	20	19	19	19	14
5	64	53	45	39	57	47	40	35	38	33	29	29	25	22	20	18	16	16	16	12
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	18	16	14	14	14	11
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	12	12	9
8	50	38	31	25	45	35	28	23	28	23	19	21	18	15	15	13	11	11	11	8
9	47	35	27	22	42	31	25	21	25	20	17	19	16	13	14	12	10	10	10	8
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	11	9	9	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3327	3327	3327
5°	3336	3240	3246
10°	3314	3176	3168
15°	3283	3105	3079
20°	3238	3027	2993
25°	3186	2942	2900
30°	3130	2857	2805
35°	3066	2770	2720
40°	3015	2687	2633
45°	2940	2609	2555
50°	2877	2520	2474
55°	2810	2435	2380
60°	2707	2328	2292
65°	2593	2214	2186
70°	2456	2082	2062
75°	2265	1937	1946
80°	2048	1789	1822
85°	1761	1640	1723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 3131 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	0.9
10°-20°	110.8	2.7
20°-30°	167.5	4.1
30°-40°	202.6	4.9
40°-50°	214.2	5.2
50°-60°	201.6	4.9
60°-70°	167.3	4.1
70°-80°	117.4	2.9
80°-90°	68.3	1.7
90°-100°	103.2	2.5
100°-110°	220.3	5.4
110°-120°	344.2	8.4
120°-130°	439.2	10.7
130°-140°	485.7	11.8
140°-150°	473.6	11.5
150°-160°	397.5	9.7
160°-170°	264.5	6.4
170°-180°	92.6	2.3
0°-30°	316.9	7.7
0°-40°	519.5	12.6
0°-60°	935.3	22.8
0°-90°	1288.2	31.4
90°-120°	667.7	16.2
90°-150°	2066.1	50.3
90°-180°	2821.0	68.7
0°-180°	4109.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	408	408	408	408	408	
5°	408	407	404	408	407	39
15°	392	392	391	395	394	110
25°	358	361	362	367	368	165
35°	313	319	324	330	331	196
45°	261	270	279	286	289	202
55°	205	214	228	237	240	182
65°	142	156	172	183	187	140
75°	79	96	115	128	132	84
85°	24	43	64	78	82	25
90°	10	36	62	80	85	8
95°	51	73	97	112	116	54
105°	180	190	210	224	230	192
115°	333	337	350	359	362	328
125°	482	482	493	500	501	430
135°	621	625	629	634	635	481
145°	754	756	757	759	759	472
155°	863	863	862	865	862	397
165°	940	937	936	940	937	265
175°	977	974	973	978	973	93
180°	979	979	979	979	979	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	408.0	408.0	408.0	408.0	408.0
2.5°	409.8	408.4	404.8	408.0	407.5
5°	408.4	407.1	403.9	407.5	407.1
7.5°	405.7	404.8	402.0	406.2	405.7
10°	402.0	401.6	399.3	403.4	403.0
12.5°	397.0	397.0	395.7	399.3	399.3
15°	391.5	392.0	390.6	394.7	394.3
17.5°	384.2	385.6	385.1	389.3	388.8
20°	376.5	377.8	378.3	382.9	382.9
22.5°	367.8	369.6	370.5	375.1	376.0
25°	358.2	360.9	362.3	367.3	367.8
27.5°	347.7	351.8	353.6	358.2	358.6
30°	337.2	340.8	344.0	349.1	350.0
32.5°	325.8	330.3	334.0	339.9	340.8
35°	313.4	318.9	323.5	329.9	331.2
37.5°	301.1	307.5	313.0	319.4	320.7
40°	289.2	295.1	301.5	308.4	310.2
42.5°	275.5	282.3	290.1	297.9	299.3
45°	261.3	270.0	278.7	286.5	288.7
47.5°	248.1	256.8	266.8	274.6	277.3
50°	233.5	243.5	253.6	262.7	265.4
52.5°	218.8	228.9	240.8	249.9	252.7
55°	204.7	214.3	228.0	237.1	239.9
57.5°	188.7	200.6	213.8	224.8	227.1
60°	173.2	185.0	200.1	210.6	214.3
62.5°	158.1	171.3	186.4	196.9	200.6
65°	141.6	156.3	171.8	183.2	186.9
67.5°	126.1	141.6	158.1	169.5	173.2
70°	110.1	125.6	143.0	155.3	158.5
72.5°	94.6	110.6	129.3	141.2	144.8
75°	78.6	95.5	114.7	127.5	131.6
77.5°	63.5	81.3	101.4	114.2	118.8
80°	49.8	68.1	88.2	101.9	105.5
82.5°	36.1	55.3	75.4	89.5	93.7
85°	24.2	43.4	64.0	77.7	82.2
87.5°	15.1	33.8	53.9	67.2	71.3
90°	9.6	36.2	61.9	79.7	84.8
92.5°	26.6	52.3	75.8	90.9	95.2
95°	51.3	73.2	97.2	111.9	116.0
97.5°	78.2	97.4	122.3	137.1	141.3
100°	111.0	125.9	150.5	164.4	167.6
102.5°	145.8	156.7	180.0	194.2	198.6
105°	180.5	190.3	210.4	224.0	229.9
107.5°	217.6	226.1	242.9	257.3	259.8
110°	255.0	262.9	278.1	287.1	293.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.9	299.4	313.0	323.0	326.7
115°	332.8	337.0	350.0	359.3	361.7
117.5°	369.9	372.7	385.6	392.9	394.3
120°	406.6	411.0	421.9	427.2	432.4
122.5°	445.2	445.9	457.5	464.4	463.8
125°	482.5	482.1	492.8	499.9	501.1
127.5°	516.6	518.4	526.0	532.7	535.2
130°	552.5	554.3	561.6	568.3	568.0
132.5°	589.6	590.6	595.4	601.7	603.6
135°	620.9	625.4	628.6	634.4	635.0
137.5°	656.5	658.4	661.7	666.2	669.3
140°	692.1	693.2	693.6	698.8	700.3
142.5°	724.2	725.7	724.5	729.5	731.4
145°	753.7	756.3	757.0	759.0	758.6
147.5°	784.0	787.3	786.6	786.3	787.3
150°	811.3	813.8	813.8	813.8	813.0
152.5°	836.5	838.0	838.8	841.1	838.8
155°	863.0	863.0	862.3	865.3	862.3
157.5°	885.7	884.2	884.2	886.5	884.2
160°	905.4	904.6	903.9	906.2	902.4
162.5°	923.6	921.3	920.5	925.1	921.3
165°	939.5	937.2	935.7	940.2	937.2
167.5°	952.3	949.3	949.3	953.9	949.3
170°	962.9	959.2	959.9	964.5	959.2
172.5°	970.5	967.5	967.5	972.8	967.5
175°	977.3	973.5	972.8	978.1	972.8
177.5°	980.3	976.6	976.6	981.9	975.8
180°	978.8	978.8	978.8	978.8	978.8

(END OF REPORT)