

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: P1025394

Luminaire Tested: S124DIP-B350D590UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025394
REPORT IS A COMBINATION OF REPORTS P995904 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

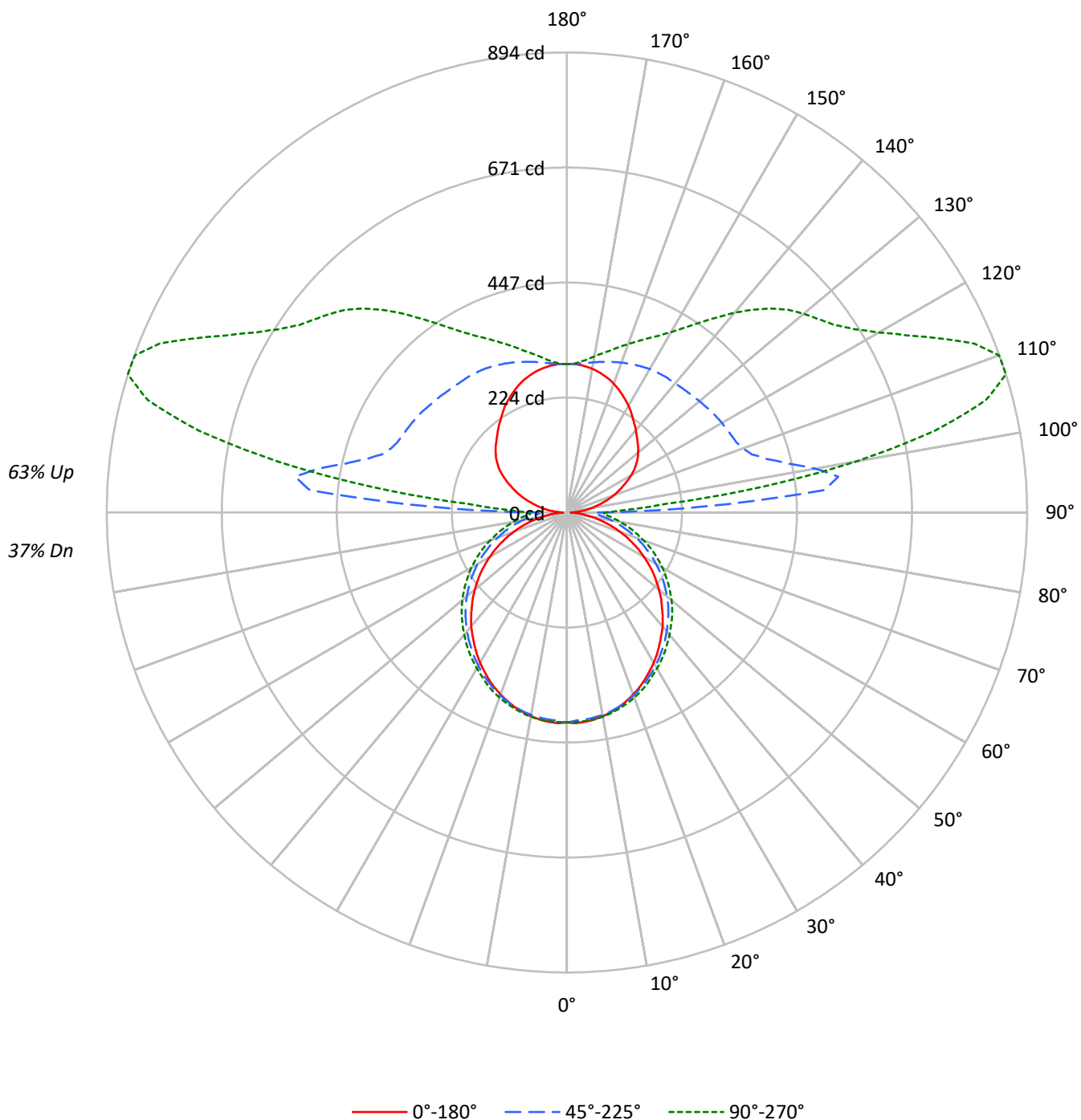
Lumens per Lamp: N/A
Luminaire Lumens: 3497.2 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 28.4
Input Voltage (V):
Input Current (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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	94	90	85	82	85	81	78	75	65	63	61	51	49	48	38	37	36
2	85	78	71	66	77	70	65	60	57	53	50	44	42	39	33	31	29
3	78	68	61	55	70	62	55	50	50	45	41	39	36	33	29	27	25
4	71	60	52	46	64	54	48	42	44	39	35	34	31	28	25	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	48	39	34	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	39	31	26	46	35	28	24	29	24	20	23	19	16	17	14	12
9	47	35	28	23	43	32	26	21	26	21	18	21	17	14	16	13	11
10	44	32	25	20	40	29	23	19	24	19	16	19	16	13	15	12	10

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: 45°

Luminance: 2940 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.7	1.1
10°-20°	110.8	3.2
20°-30°	167.5	4.8
30°-40°	202.6	5.8
40°-50°	214.2	6.1
50°-60°	201.6	5.8
60°-70°	167.3	4.8
70°-80°	117.4	3.4
80°-90°	67.3	1.9
90°-100°	253.7	7.3
100°-110°	465.0	13.3
110°-120°	408.0	11.7
120°-130°	337.3	9.6
130°-140°	277.0	7.9
140°-150°	208.9	6.0
150°-160°	146.2	4.2
160°-170°	86.0	2.5
170°-180°	28.0	0.8
0°-30°	316.9	9.1
0°-40°	519.5	14.9
0°-60°	935.3	26.7
0°-90°	1287.2	36.8
90°-120°	1126.6	32.2
90°-150°	1949.9	55.8
90°-180°	2210.0	63.2
0°-180°	3497.2	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°	8	30	55	70	74	6
95°	25	80	502	281	194	25
105°	70	109	402	842	843	75
115°	119	153	353	668	800	119
125°	164	195	343	564	635	147
135°	194	231	331	493	560	150
145°	223	255	325	408	451	140
155°	253	273	316	358	374	117
165°	276	284	303	321	326	78
175°	288	288	291	295	294	27
180°	288	288	288	288	288	

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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°	7.9	30.1	55.4	69.8	74.0
92.5°	14.8	66.4	264.6	128.7	110.5
95°	24.6	79.9	501.6	280.8	194.5
97.5°	36.7	83.9	531.7	516.2	385.6
100°	48.1	90.6	490.3	693.2	570.0
102.5°	59.4	99.0	439.9	802.6	730.9
105°	70.4	109.2	402.0	842.0	842.6
107.5°	83.4	120.4	376.4	827.0	894.3
110°	96.1	131.0	363.8	778.8	893.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	108.0	142.1	356.5	720.6	857.0
115°	119.4	153.4	353.0	668.5	800.3
117.5°	131.9	164.1	350.2	626.7	745.3
120°	144.0	174.2	347.9	597.5	699.5
122.5°	155.3	184.5	345.0	578.0	662.8
125°	164.4	194.6	342.6	563.6	635.1
127.5°	173.5	204.8	339.2	549.2	616.9
130°	180.5	214.2	336.3	532.9	600.6
132.5°	187.8	222.8	334.0	514.3	583.0
135°	194.1	231.0	331.1	492.6	560.5
137.5°	200.9	237.6	329.3	469.8	534.5
140°	208.3	244.2	327.3	447.8	506.7
142.5°	215.8	250.1	326.4	427.5	477.3
145°	223.2	255.0	325.3	408.4	450.6
147.5°	231.7	260.1	323.6	392.4	425.6
150°	239.6	264.9	321.9	379.1	404.6
152.5°	246.5	269.5	319.1	368.4	387.6
155°	253.3	273.4	316.2	358.2	373.5
157.5°	260.1	277.1	313.4	348.5	360.4
160°	266.4	280.2	310.0	338.9	348.5
162.5°	272.0	282.8	306.6	329.6	337.2
165°	276.0	284.5	303.2	321.0	325.9
167.5°	280.5	285.9	299.8	313.6	316.8
170°	283.4	287.0	296.4	306.4	308.3
172.5°	286.2	287.9	293.0	299.8	299.8
175°	287.9	288.5	290.7	294.7	293.6
177.5°	289.0	288.5	289.0	291.0	289.0
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)