

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: P1025421

Luminaire Tested: S124DIP-B350D590UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025421
REPORT IS A COMBINATION OF REPORTS P995946 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB40-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

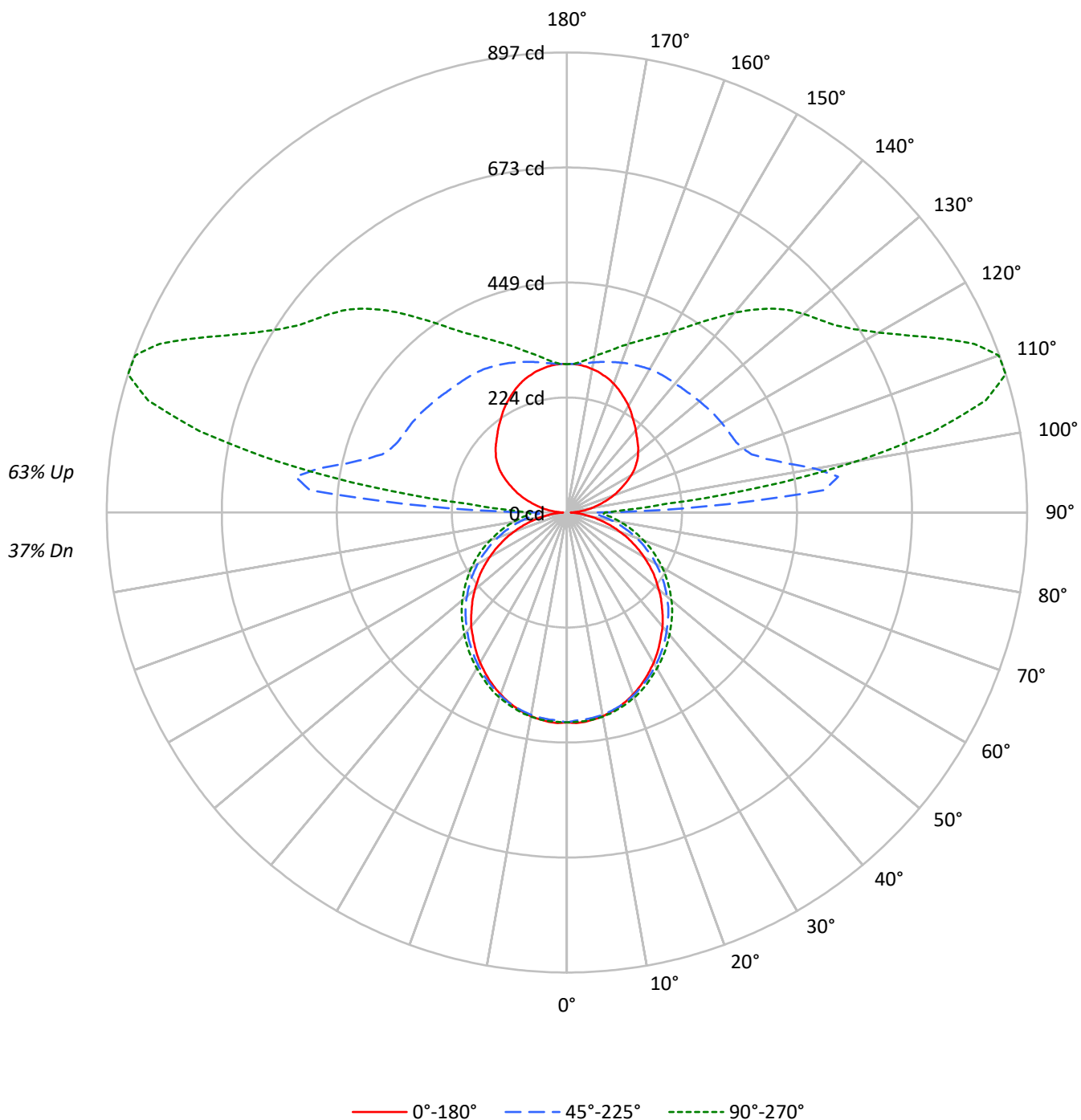
Lumens per Lamp: N/A
Luminaire Lumens: 3507.2 lumens
Efficiency: N/A
Efficacy: 123.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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°	3337	3337	3337
5°	3346	3249	3255
10°	3324	3186	3176
15°	3293	3114	3087
20°	3246	3036	3001
25°	3195	2950	2907
30°	3138	2865	2813
35°	3075	2778	2728
40°	3024	2695	2640
45°	2949	2616	2563
50°	2884	2527	2481
55°	2818	2441	2386
60°	2715	2335	2298
65°	2600	2220	2192
70°	2463	2088	2069
75°	2271	1942	1952
80°	2052	1793	1828
85°	1768	1643	1729

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2949 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.8	1.1
10°-20°	111.1	3.2
20°-30°	168.0	4.8
30°-40°	203.2	5.8
40°-50°	214.8	6.1
50°-60°	202.2	5.8
60°-70°	167.7	4.8
70°-80°	117.7	3.4
80°-90°	67.5	1.9
90°-100°	254.4	7.3
100°-110°	466.3	13.3
110°-120°	409.2	11.7
120°-130°	338.3	9.6
130°-140°	277.8	7.9
140°-150°	209.5	6.0
150°-160°	146.6	4.2
160°-170°	86.2	2.5
170°-180°	28.0	0.8
0°-30°	317.8	9.1
0°-40°	521.0	14.9
0°-60°	938.0	26.7
0°-90°	1290.9	36.8
90°-120°	1129.8	32.2
90°-150°	1955.4	55.8
90°-180°	2216.0	63.2
0°-180°	3507.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	409	409	409	409	409	
5°	410	408	405	409	408	39
15°	393	393	392	396	395	111
25°	359	362	363	368	369	165
35°	314	320	324	331	332	197
45°	262	271	280	287	290	203
55°	205	215	229	238	240	183
65°	142	157	172	184	187	141
75°	79	96	115	128	132	84
85°	24	44	64	78	82	25
90°	8	30	56	70	74	6
95°	25	80	503	282	195	25
105°	71	110	403	844	845	75
115°	120	154	354	670	803	119
125°	165	195	344	565	637	147
135°	195	232	332	494	562	151
145°	224	256	326	410	452	141
155°	254	274	317	359	374	117
165°	277	285	304	322	327	78
175°	289	289	292	296	294	27
180°	289	289	289	289	289	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	409.2	409.2	409.2	409.2	409.2
2.5°	411.0	409.6	406.0	409.2	408.7
5°	409.6	408.2	405.0	408.7	408.2
7.5°	406.9	406.0	403.2	407.3	406.9
10°	403.2	402.7	400.5	404.6	404.1
12.5°	398.2	398.2	396.8	400.5	400.5
15°	392.7	393.1	391.8	395.9	395.4
17.5°	385.3	386.7	386.3	390.4	389.9
20°	377.5	378.9	379.4	384.0	384.0
22.5°	368.8	370.7	371.6	376.2	377.1
25°	359.2	362.0	363.3	368.4	368.8
27.5°	348.7	352.8	354.6	359.2	359.7
30°	338.1	341.8	345.0	350.1	351.0
32.5°	326.7	331.3	334.9	340.9	341.8
35°	314.3	319.8	324.4	330.8	332.2
37.5°	301.9	308.4	313.9	320.3	321.6
40°	290.0	296.0	302.4	309.3	311.1
42.5°	276.3	283.2	290.9	298.7	300.1
45°	262.1	270.8	279.5	287.3	289.6
47.5°	248.8	257.5	267.6	275.4	278.1
50°	234.1	244.2	254.3	263.5	266.2
52.5°	219.5	229.6	241.5	250.6	253.4
55°	205.3	214.9	228.6	237.8	240.5
57.5°	189.2	201.1	214.4	225.4	227.7
60°	173.7	185.6	200.7	211.2	214.9
62.5°	158.5	171.8	186.9	197.5	201.1
65°	142.0	156.7	172.3	183.7	187.4
67.5°	126.5	142.0	158.5	170.0	173.7
70°	110.4	126.0	143.4	155.8	159.0
72.5°	94.8	110.9	129.7	141.6	145.2
75°	78.8	95.8	115.0	127.8	132.0
77.5°	63.7	81.6	101.7	114.5	119.1
80°	49.9	68.3	88.4	102.2	105.8
82.5°	36.2	55.4	75.6	89.8	93.9
85°	24.3	43.5	64.1	77.9	82.5
87.5°	15.1	33.9	54.1	67.4	71.5
90°	7.9	30.2	55.6	70.0	74.2
92.5°	14.9	66.6	265.4	129.0	110.8
95°	24.8	80.2	503.1	281.6	195.1
97.5°	36.8	84.1	533.2	517.8	386.6
100°	48.2	90.9	491.7	695.1	571.5
102.5°	59.6	99.2	441.1	804.8	732.9
105°	70.6	109.6	403.0	844.4	845.0
107.5°	83.7	120.8	377.4	829.4	896.8
110°	96.3	131.4	364.8	781.2	895.6

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	108.3	142.5	357.4	722.7	859.4
115°	119.8	153.8	354.0	670.4	802.6
117.5°	132.3	164.6	351.1	628.4	747.4
120°	144.4	174.8	348.9	599.2	701.6
122.5°	155.7	185.0	346.0	579.6	664.7
125°	164.9	195.2	343.6	565.1	636.9
127.5°	174.0	205.4	340.1	550.8	618.7
130°	181.0	214.8	337.3	534.6	602.3
132.5°	188.4	223.4	334.9	515.8	584.8
135°	194.7	231.6	332.0	494.0	562.1
137.5°	201.5	238.3	330.2	471.2	536.1
140°	208.9	244.9	328.3	449.0	508.2
142.5°	216.5	250.8	327.4	428.6	478.6
145°	223.8	255.8	326.2	409.6	451.9
147.5°	232.4	260.8	324.5	393.5	426.8
150°	240.3	265.7	322.8	380.2	405.8
152.5°	247.2	270.2	320.0	369.4	388.7
155°	254.0	274.2	317.1	359.2	374.5
157.5°	260.9	277.9	314.3	349.5	361.5
160°	267.1	281.0	310.9	339.8	349.5
162.5°	272.8	283.6	307.5	330.5	338.2
165°	276.8	285.3	304.1	322.0	326.8
167.5°	281.3	286.7	300.6	314.5	317.7
170°	284.2	287.8	297.2	307.2	309.2
172.5°	287.0	288.7	293.8	300.6	300.6
175°	288.7	289.3	291.5	295.5	294.4
177.5°	289.8	289.3	289.8	291.8	289.8
180°	289.3	289.3	289.3	289.3	289.3

(END OF REPORT)