

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: P1025392

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025392
REPORT IS A COMBINATION OF REPORTS P995902 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB27-4F0-XX-W2A-D
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

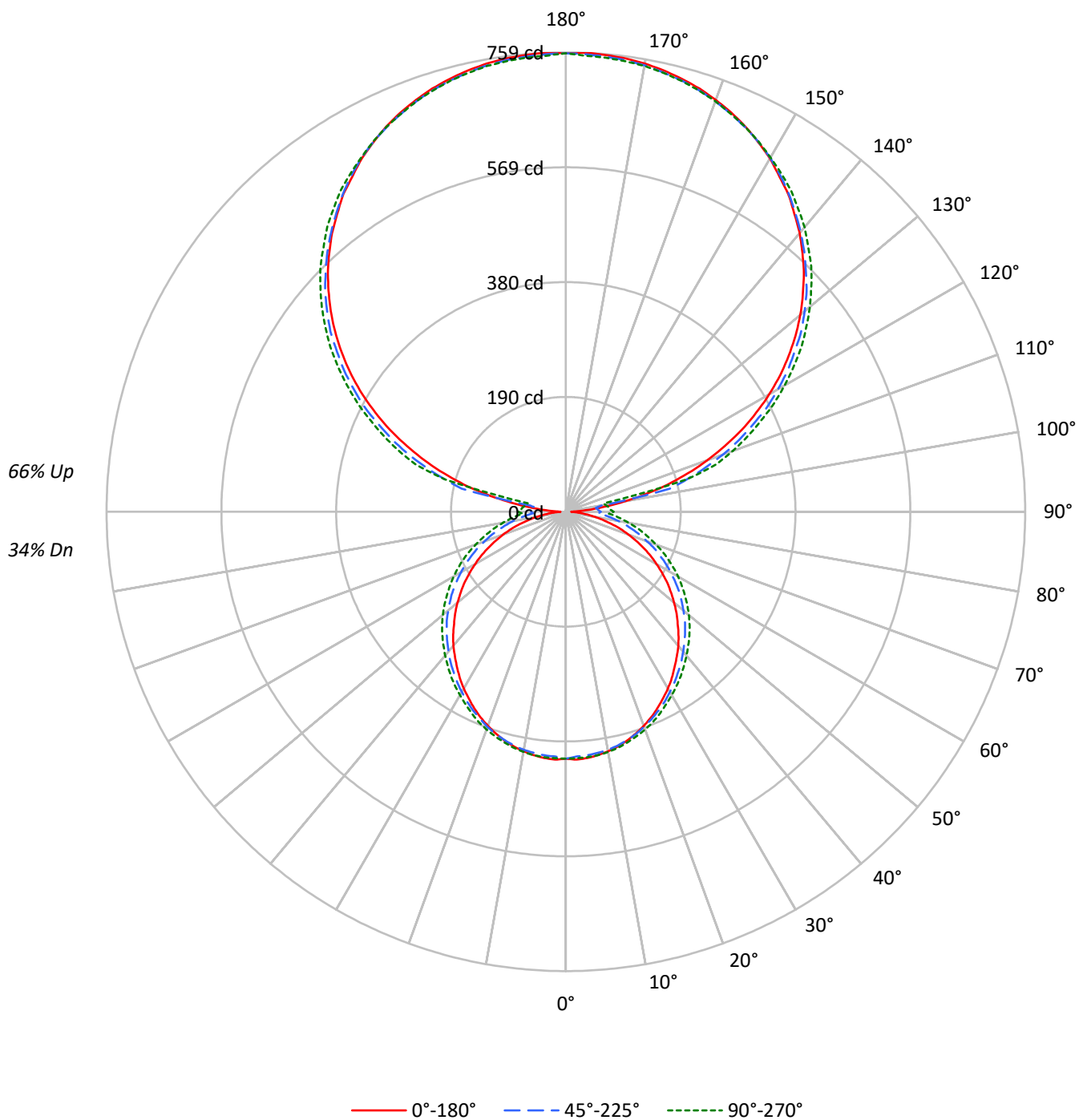
Lumens per Lamp: N/A
Luminaire Lumens: 3737.0 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	89	85	81	84	80	77	74	64	62	60	50	48	46	36	35	34
2	85	77	71	66	76	70	65	60	56	52	49	43	40	38	31	29	28
3	77	68	60	54	69	61	55	50	49	44	41	38	35	32	27	25	23
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	24	22	20
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15
7	55	43	35	29	49	39	32	27	31	26	22	24	21	18	18	15	13
8	51	38	31	26	46	35	28	24	28	23	20	22	18	16	16	14	12
9	47	35	28	23	42	32	25	21	26	21	17	20	17	14	15	12	11
10	44	32	25	20	40	29	23	19	24	19	16	19	15	13	14	11	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	1.0
10°-20°	110.8	3.0
20°-30°	167.5	4.5
30°-40°	202.6	5.4
40°-50°	214.2	5.7
50°-60°	201.6	5.4
60°-70°	167.3	4.5
70°-80°	117.4	3.1
80°-90°	67.7	1.8
90°-100°	64.6	1.7
100°-110°	194.8	5.2
110°-120°	335.9	9.0
120°-130°	412.5	11.0
130°-140°	434.3	11.6
140°-150°	402.6	10.8
150°-160°	323.9	8.7
160°-170°	208.9	5.6
170°-180°	72.0	1.9
0°-30°	316.9	8.5
0°-40°	519.5	13.9
0°-60°	935.3	25.0
0°-90°	1287.7	34.5
90°-120°	595.2	15.9
90°-150°	1844.6	49.4
90°-180°	2449.0	65.5
0°-180°	3737.0	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°	9	34	58	74	79	7
95°	37	33	52	68	73	43
105°	175	187	207	224	207	183
115°	321	327	341	352	355	316
125°	450	451	462	472	475	402
135°	556	556	561	570	574	429
145°	641	642	642	645	648	400
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

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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°	9.0	33.5	57.7	74.4	79.1
92.5°	15.4	30.2	54.4	70.6	74.2
95°	37.1	32.9	52.2	68.0	72.6
97.5°	65.0	90.7	50.0	64.6	69.4
100°	97.9	120.0	59.6	62.4	66.2
102.5°	135.3	152.2	176.3	60.7	64.4
105°	174.7	187.2	207.0	223.5	206.7
107.5°	211.5	221.0	241.0	255.2	260.7
110°	248.5	256.6	275.9	287.5	292.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.3	293.2	309.4	318.8	324.8
115°	321.2	327.1	341.1	352.2	355.4
117.5°	354.6	359.7	375.1	384.1	387.7
120°	388.2	391.9	404.5	414.7	417.3
122.5°	419.9	421.1	434.5	444.3	446.3
125°	449.5	451.3	461.6	472.0	475.3
127.5°	478.4	478.5	490.5	498.1	500.7
130°	505.7	505.8	514.8	523.6	526.4
132.5°	531.2	531.9	539.6	548.0	550.1
135°	556.2	555.7	561.1	569.6	573.5
137.5°	578.9	578.5	583.1	591.1	592.8
140°	601.0	601.7	603.3	611.0	613.7
142.5°	620.4	622.7	622.8	628.9	630.8
145°	640.8	642.0	642.0	645.3	648.3
147.5°	656.7	659.6	659.0	660.1	662.5
150°	674.3	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)