

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: P1025412

Luminaire Tested: S124DIP-B350D590UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025412
REPORT IS A COMBINATION OF REPORTS P995937 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D590UB35-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

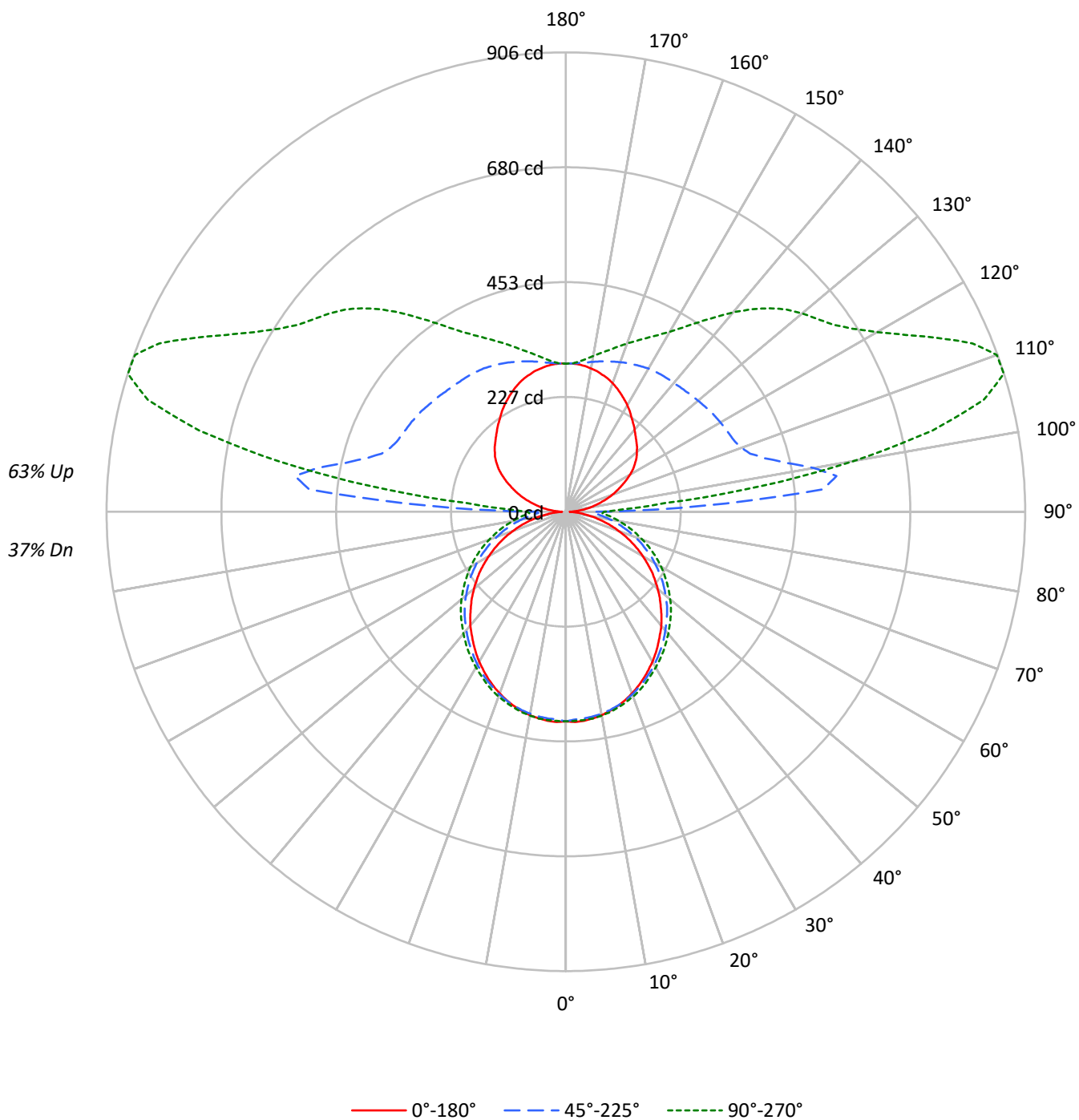
Lumens per Lamp: N/A
Luminaire Lumens: 3542.3 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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°	3370	3370	3370
5°	3379	3282	3288
10°	3358	3218	3209
15°	3326	3145	3119
20°	3279	3066	3031
25°	3227	2980	2937
30°	3170	2894	2841
35°	3106	2806	2755
40°	3054	2721	2667
45°	2978	2643	2589
50°	2913	2552	2506
55°	2846	2466	2411
60°	2742	2358	2321
65°	2628	2242	2214
70°	2488	2110	2089
75°	2294	1962	1971
80°	2073	1811	1847
85°	1783	1660	1746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	1.1
10°-20°	112.2	3.2
20°-30°	169.6	4.8
30°-40°	205.2	5.8
40°-50°	217.0	6.1
50°-60°	204.2	5.8
60°-70°	169.4	4.8
70°-80°	118.9	3.4
80°-90°	68.2	1.9
90°-100°	256.9	7.3
100°-110°	470.9	13.3
110°-120°	413.3	11.7
120°-130°	341.6	9.6
130°-140°	280.6	7.9
140°-150°	211.6	6.0
150°-160°	148.1	4.2
160°-170°	87.1	2.5
170°-180°	28.3	0.8
0°-30°	321.0	9.1
0°-40°	526.2	14.9
0°-60°	947.4	26.7
0°-90°	1303.9	36.8
90°-120°	1141.1	32.2
90°-150°	1975.0	55.8
90°-180°	2238.0	63.2
0°-180°	3542.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	413	413	413	413	413	
5°	414	412	409	413	412	39
15°	397	397	396	400	399	112
25°	363	366	367	372	372	167
35°	318	323	328	334	336	199
45°	265	274	282	290	292	205
55°	207	217	231	240	243	185
65°	144	158	174	186	189	142
75°	80	97	116	129	133	85
85°	24	44	65	79	83	26
90°	8	30	56	71	75	6
95°	25	81	508	284	197	26
105°	71	111	407	853	853	76
115°	121	155	358	677	811	120
125°	167	197	347	571	643	149
135°	197	234	335	499	568	152
145°	226	258	330	414	456	142
155°	257	277	320	363	378	118
165°	280	288	307	325	330	79
175°	292	292	294	298	297	28
180°	292	292	292	292	292	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	413.3	413.3	413.3	413.3	413.3
2.5°	415.1	413.7	410.0	413.3	412.8
5°	413.7	412.3	409.1	412.8	412.3
7.5°	411.0	410.0	407.3	411.4	411.0
10°	407.3	406.8	404.5	408.6	408.2
12.5°	402.2	402.2	400.8	404.5	404.5
15°	396.6	397.1	395.7	399.8	399.4
17.5°	389.2	390.6	390.1	394.3	393.8
20°	381.3	382.7	383.2	387.8	387.8
22.5°	372.5	374.4	375.3	379.9	380.9
25°	362.8	365.6	367.0	372.1	372.5
27.5°	352.2	356.3	358.2	362.8	363.3
30°	341.5	345.2	348.5	353.6	354.5
32.5°	330.0	334.6	338.3	344.3	345.2
35°	317.5	323.0	327.7	334.1	335.5
37.5°	305.0	311.5	317.0	323.5	324.9
40°	292.9	299.0	305.4	312.4	314.2
42.5°	279.1	286.0	293.9	301.7	303.1
45°	264.7	273.5	282.3	290.2	292.5
47.5°	251.3	260.1	270.3	278.1	280.9
50°	236.5	246.7	256.8	266.1	268.9
52.5°	221.7	231.9	243.9	253.1	255.9
55°	207.3	217.0	230.9	240.2	243.0
57.5°	191.1	203.2	216.6	227.7	230.0
60°	175.4	187.4	202.7	213.3	217.0
62.5°	160.1	173.5	188.8	199.5	203.2
65°	143.5	158.3	174.0	185.6	189.3
67.5°	127.7	143.5	160.1	171.7	175.4
70°	111.5	127.3	144.9	157.3	160.6
72.5°	95.8	112.0	131.0	143.0	146.7
75°	79.6	96.7	116.2	129.1	133.3
77.5°	64.3	82.4	102.7	115.7	120.3
80°	50.4	69.0	89.3	103.2	106.9
82.5°	36.6	56.0	76.4	90.7	94.9
85°	24.5	44.0	64.8	78.7	83.3
87.5°	15.3	34.2	54.6	68.0	72.2
90°	8.0	30.5	56.1	70.7	75.0
92.5°	14.9	67.3	268.0	130.4	111.9
95°	24.9	81.0	508.1	284.4	197.0
97.5°	37.2	85.0	538.4	523.0	390.5
100°	48.7	91.7	496.7	702.1	577.2
102.5°	60.2	100.2	445.6	812.8	740.2
105°	71.4	110.7	407.0	852.8	853.4
107.5°	84.6	121.9	381.2	837.6	905.7
110°	97.3	132.8	368.5	788.9	904.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.4	144.0	361.0	729.9	867.9
115°	121.0	155.2	357.6	677.1	810.6
117.5°	133.7	166.4	354.6	634.8	755.0
120°	145.8	176.4	352.3	605.2	708.5
122.5°	157.3	186.9	349.4	585.4	671.3
125°	166.6	197.2	347.1	570.8	643.3
127.5°	175.8	207.4	343.5	556.2	624.9
130°	182.8	217.0	340.6	539.9	608.3
132.5°	190.2	225.6	338.3	520.8	590.5
135°	196.6	234.0	335.4	499.0	567.6
137.5°	203.5	240.7	333.5	475.9	541.4
140°	211.0	247.3	331.5	453.4	513.3
142.5°	218.6	253.3	330.6	433.0	483.3
145°	226.1	258.3	329.5	413.8	456.3
147.5°	234.7	263.4	327.7	397.4	431.1
150°	242.7	268.4	326.0	384.0	409.8
152.5°	249.7	272.9	323.2	373.1	392.6
155°	256.6	277.0	320.3	362.8	378.3
157.5°	263.5	280.6	317.4	353.0	365.1
160°	269.8	283.8	314.0	343.2	353.0
162.5°	275.5	286.4	310.5	333.8	341.5
165°	279.5	288.2	307.1	325.2	330.0
167.5°	284.1	289.6	303.6	317.7	320.9
170°	287.0	290.8	300.2	310.2	312.2
172.5°	289.9	291.6	296.7	303.6	303.6
175°	291.6	292.2	294.5	298.5	297.3
177.5°	292.7	292.2	292.7	294.8	292.7
180°	292.2	292.2	292.2	292.2	292.2

(END OF REPORT)