

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: P1025451

Luminaire Tested: S124DIP-B350D810UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025451
REPORT IS A COMBINATION OF REPORTS P995991 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124DIP-B350D810UB30-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

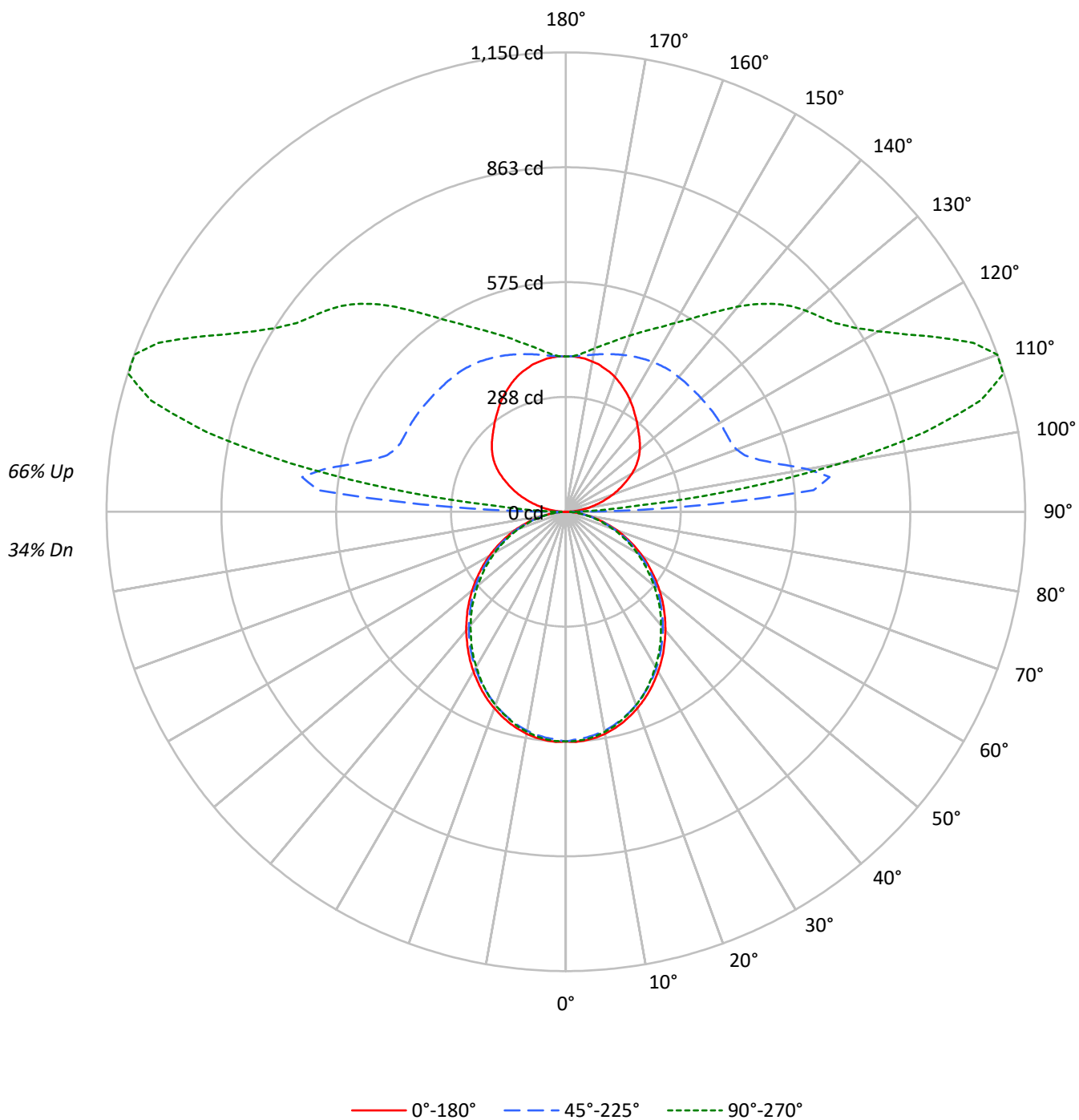
Lumens per Lamp: N/A
Luminaire Lumens: 4314.7 lumens
Efficiency: N/A
Efficacy: 126.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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
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	57	57	57	42	42	42
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35
2	86	79	73	68	77	71	66	62	57	54	50	44	42	40	32	31	30
3	78	69	62	56	70	63	56	51	50	46	42	39	36	34	29	27	25
4	71	61	53	47	64	55	49	44	45	40	36	35	31	29	26	23	22
5	66	54	46	40	59	49	42	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	17
7	56	44	36	31	50	40	33	28	32	27	24	26	22	19	19	17	15
8	52	40	32	27	46	36	29	25	29	24	21	23	20	17	17	15	13
9	48	36	29	24	43	33	26	22	27	22	19	21	18	15	16	14	12
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4690	4690	4690
5°	4693	4555	4560
10°	4654	4428	4397
15°	4587	4278	4213
20°	4502	4115	4023
25°	4405	3944	3818
30°	4290	3758	3593
35°	4170	3567	3375
40°	4045	3363	3144
45°	3914	3157	2928
50°	3770	2959	2689
55°	3612	2726	2451
60°	3450	2471	2203
65°	3265	2209	1924
70°	3054	1892	1625
75°	2735	1525	1301
80°	2332	1103	916
85°	1812	615	493

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 3914 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	1.3
10°-20°	152.7	3.5
20°-30°	224.7	5.2
30°-40°	261.2	6.1
40°-50°	261.2	6.1
50°-60°	228.5	5.3
60°-70°	169.6	3.9
70°-80°	96.2	2.2
80°-90°	29.1	0.7
90°-100°	288.8	6.7
100°-110°	587.3	13.6
110°-120°	523.5	12.1
120°-130°	439.8	10.2
130°-140°	367.0	8.5
140°-150°	280.3	6.5
150°-160°	197.0	4.6
160°-170°	115.9	2.7
170°-180°	37.7	0.9
0°-30°	431.6	10.0
0°-40°	692.9	16.1
0°-60°	1182.6	27.4
0°-90°	1477.5	34.2
90°-120°	1399.6	32.4
90°-150°	2486.6	57.6
90°-180°	2837.0	65.8
0°-180°	4314.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	575	573	568	573	572	55
15°	547	545	538	541	540	154
25°	495	492	486	486	484	228
35°	426	423	416	413	411	267
45°	348	345	337	332	331	268
55°	263	262	255	250	247	236
65°	178	176	171	167	164	176
75°	95	93	90	88	88	101
85°	25	25	24	24	24	27
90°	1	6	14	15	16	3
95°	25	79	622	308	186	28
105°	89	129	501	1079	1075	95
115°	157	197	447	858	1032	156
125°	219	260	444	731	823	195
135°	260	310	441	648	736	201
145°	300	344	438	547	601	188
155°	341	369	426	483	503	157
165°	372	383	409	433	439	105
175°	388	389	392	397	396	37
180°	389	389	389	389	389	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	576.9	575.5	570.5	575.1	574.6
5°	574.6	572.8	567.7	572.8	571.8
7.5°	570.5	568.6	563.1	567.2	566.8
10°	564.5	562.6	556.6	560.3	559.4
12.5°	556.6	554.8	548.3	552.5	551.1
15°	547.0	545.1	538.2	541.0	539.6
17.5°	535.9	533.6	527.1	529.0	528.1
20°	523.5	521.1	514.2	515.6	514.7
22.5°	510.1	506.9	500.0	502.7	500.9
25°	495.3	492.1	485.7	486.1	484.3
27.5°	478.8	475.5	469.5	468.6	466.3
30°	462.2	458.5	452.5	450.6	448.3
32.5°	444.7	441.4	435.0	432.7	430.4
35°	426.2	423.0	416.5	413.3	411.0
37.5°	406.9	404.1	397.2	394.0	390.7
40°	388.0	384.3	377.4	372.8	370.5
42.5°	367.7	365.9	358.0	352.5	351.1
45°	347.9	344.7	337.3	332.2	330.8
47.5°	327.2	324.9	317.9	312.4	308.7
50°	306.0	304.1	297.7	291.2	288.5
52.5°	285.2	282.9	276.0	270.5	266.8
55°	263.1	261.7	255.3	249.7	247.0
57.5°	242.4	241.0	234.5	229.0	226.2
60°	220.7	218.4	212.4	208.3	206.0
62.5°	199.5	197.7	191.2	187.5	185.2
65°	178.3	176.0	171.4	166.8	164.5
67.5°	156.7	154.8	150.2	145.6	145.1
70°	136.9	133.6	129.9	126.3	124.9
72.5°	115.7	112.4	109.7	106.9	105.5
75°	94.9	92.6	90.3	88.5	88.0
77.5°	74.6	73.7	71.4	71.0	69.6
80°	56.7	55.3	54.4	53.5	53.0
82.5°	39.2	38.7	38.7	38.2	37.8
85°	24.9	24.9	24.0	24.0	23.5
87.5°	12.0	11.5	11.1	11.1	11.1
90°	0.8	6.1	13.7	15.3	16.0
92.5°	10.7	58.8	299.4	99.0	69.5
95°	25.2	79.4	622.5	308.2	186.4
97.5°	42.0	87.8	666.0	629.4	447.6
100°	58.0	99.3	614.1	870.8	700.4
102.5°	73.3	113.0	549.2	1022.0	920.4
105°	89.4	129.4	501.0	1078.8	1074.6
107.5°	106.9	146.2	469.7	1061.6	1148.0
110°	124.5	163.1	455.2	1000.6	1149.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.3	179.9	448.3	925.7	1104.4
115°	157.3	197.4	446.8	858.5	1031.9
117.5°	174.1	213.9	446.0	805.8	960.8
120°	190.9	229.9	446.0	770.3	902.8
122.5°	206.2	245.6	445.3	747.0	857.0
125°	219.2	260.5	444.5	730.6	823.4
127.5°	231.4	274.2	443.0	714.9	802.0
130°	241.4	287.6	442.2	696.2	783.6
132.5°	251.3	299.0	441.5	674.0	763.0
135°	260.4	310.1	440.7	648.4	736.3
137.5°	269.6	319.6	440.7	621.0	705.0
140°	279.5	328.5	439.9	594.2	670.6
142.5°	290.2	336.4	439.9	569.4	633.9
145°	300.2	343.7	438.4	546.9	601.1
147.5°	311.6	350.5	436.1	528.2	570.5
150°	322.3	357.0	433.8	511.0	545.3
152.5°	332.2	363.2	430.0	496.4	522.4
155°	341.4	368.6	426.2	482.7	503.3
157.5°	350.6	373.5	422.4	469.7	485.8
160°	359.0	377.7	417.8	456.8	469.7
162.5°	366.6	381.2	413.2	444.2	454.4
165°	372.0	383.4	408.6	432.7	439.2
167.5°	378.1	385.3	404.0	422.8	427.0
170°	381.9	386.8	399.5	412.8	415.5
172.5°	385.7	388.0	394.9	404.0	404.0
175°	388.0	388.8	391.8	397.2	395.6
177.5°	389.5	388.8	389.5	392.2	389.5
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)