

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: P1025450

Luminaire Tested: S124DIP-B350D810UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1025450
REPORT IS A COMBINATION OF REPORTS P995990 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-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

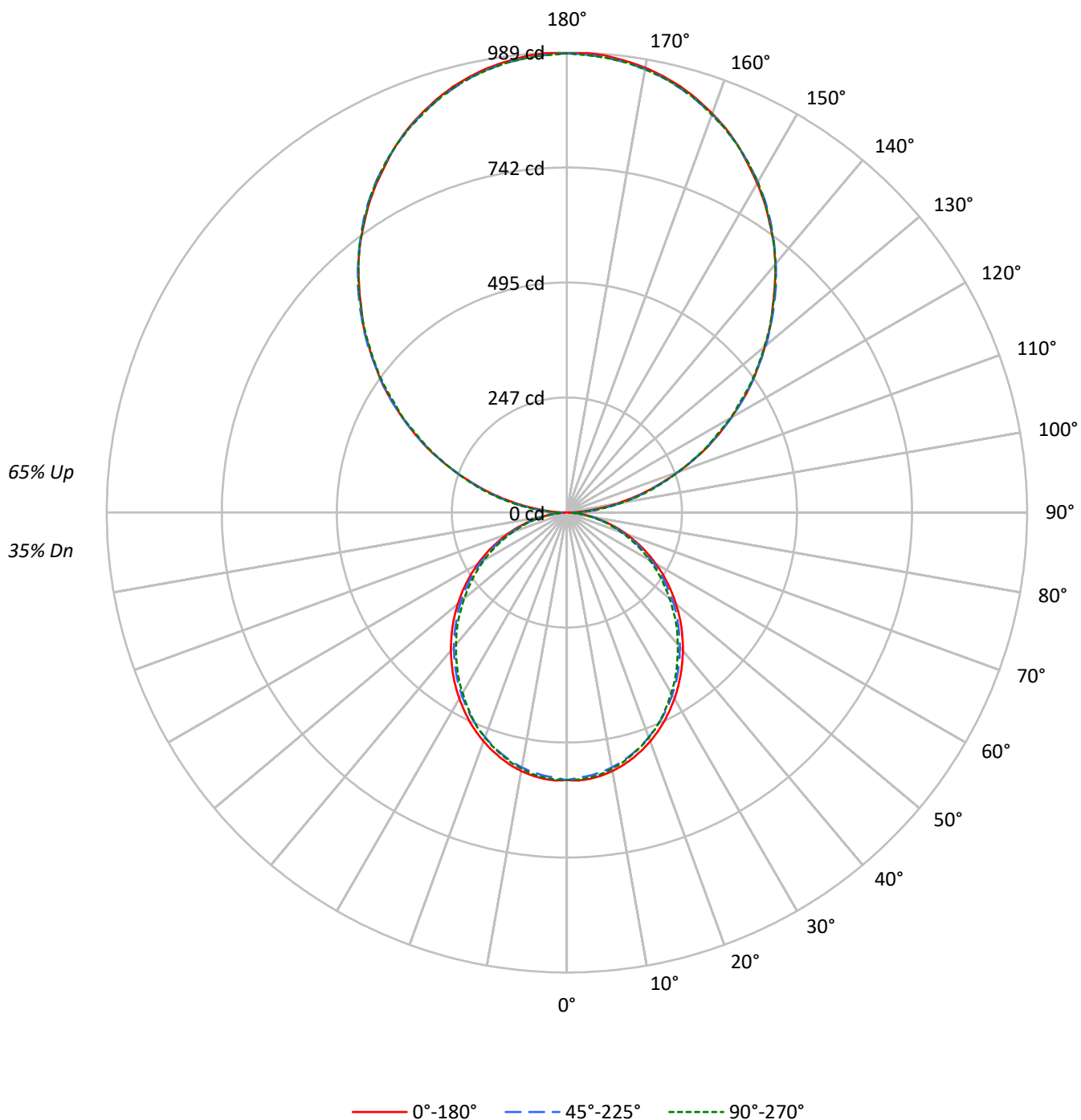
Lumens per Lamp: N/A
Luminaire Lumens: 4217.0 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42
1	94	90	86	83	85	82	78	75	66	63	61	51	49	48	37	37	36
2	86	79	73	68	77	71	66	62	57	54	51	45	42	40	33	31	30
3	78	69	62	56	71	63	57	52	51	46	43	39	36	34	29	27	26
4	72	61	53	47	64	55	49	44	45	40	36	35	32	29	26	24	22
5	66	54	46	41	59	49	43	37	40	35	31	31	28	25	23	21	19
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17
7	56	44	36	31	50	40	33	28	33	28	24	26	22	19	19	17	15
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	15	13
9	48	36	29	24	43	33	27	22	27	22	19	22	18	15	16	14	12
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	15	13	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	3.6
20°-30°	224.7	5.3
30°-40°	261.2	6.2
40°-50°	261.2	6.2
50°-60°	228.5	5.4
60°-70°	169.6	4.0
70°-80°	96.2	2.3
80°-90°	29.7	0.7
90°-100°	64.3	1.5
100°-110°	192.7	4.6
110°-120°	327.4	7.8
120°-130°	431.8	10.2
130°-140°	485.0	11.5
140°-150°	476.7	11.3
150°-160°	400.9	9.5
160°-170°	266.7	6.3
170°-180°	93.4	2.2
0°-30°	431.6	10.2
0°-40°	692.9	16.4
0°-60°	1182.6	28.0
0°-90°	1478.1	35.1
90°-120°	584.5	13.9
90°-150°	1977.9	46.9
90°-180°	2739.0	65.0
0°-180°	4217.0	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°	2	11	17	21	23	5
95°	46	53	58	60	60	50
105°	178	179	182	184	186	189
115°	333	333	331	331	330	328
125°	485	485	484	482	481	432
135°	625	630	630	628	626	484
145°	760	763	763	763	760	475
155°	870	870	870	873	870	401
165°	947	945	944	948	945	267
175°	986	982	981	986	981	94
180°	987	987	987	987	987	

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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°	2.3	10.7	16.8	21.4	22.9
92.5°	19.8	29.8	33.6	35.9	36.6
95°	45.8	52.7	58.0	60.3	60.3
97.5°	73.3	79.4	85.5	88.6	88.6
100°	106.9	109.9	116.8	118.3	118.3
102.5°	142.0	142.8	148.9	151.2	151.9
105°	177.9	178.6	181.7	184.0	186.3
107.5°	215.3	216.1	216.8	219.9	219.1
110°	253.5	255.0	254.2	252.7	255.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	293.2	291.6	291.6	291.6
115°	332.9	332.9	331.3	330.6	329.8
117.5°	370.3	370.3	369.5	367.2	364.9
120°	407.7	410.7	408.4	404.6	406.1
122.5°	446.6	447.4	446.6	444.3	440.5
125°	484.8	484.8	484.0	482.5	481.0
127.5°	519.1	521.4	519.9	518.4	517.6
130°	555.8	558.1	558.1	556.5	553.5
132.5°	593.2	594.7	594.0	592.4	591.7
135°	625.3	629.8	629.8	628.3	626.0
137.5°	661.1	663.4	664.9	662.7	663.4
140°	697.0	698.5	698.5	697.8	697.0
142.5°	729.8	731.4	730.6	730.6	730.6
145°	759.6	762.7	763.4	762.7	760.4
147.5°	790.2	794.0	793.2	792.4	791.7
150°	817.6	820.7	820.7	820.7	819.9
152.5°	843.6	845.1	845.9	848.2	845.9
155°	870.3	870.3	869.5	872.6	869.5
157.5°	893.2	891.7	891.7	894.0	891.7
160°	913.1	912.3	911.5	913.8	910.0
162.5°	931.4	929.1	928.3	932.9	929.1
165°	947.4	945.1	943.6	948.2	945.1
167.5°	960.4	957.3	957.3	961.9	957.3
170°	971.1	967.3	968.0	972.6	967.3
172.5°	978.7	975.7	975.7	981.0	975.7
175°	985.6	981.8	981.0	986.4	981.0
177.5°	988.6	984.8	984.8	990.2	984.1
180°	987.1	987.1	987.1	987.1	987.1

(END OF REPORT)