

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: P1001387

Luminaire Tested: SA4XXDIP-B350D810UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001387
REPORT IS A COMBINATION OF REPORTS P996006 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B350D810UB40-4F0-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

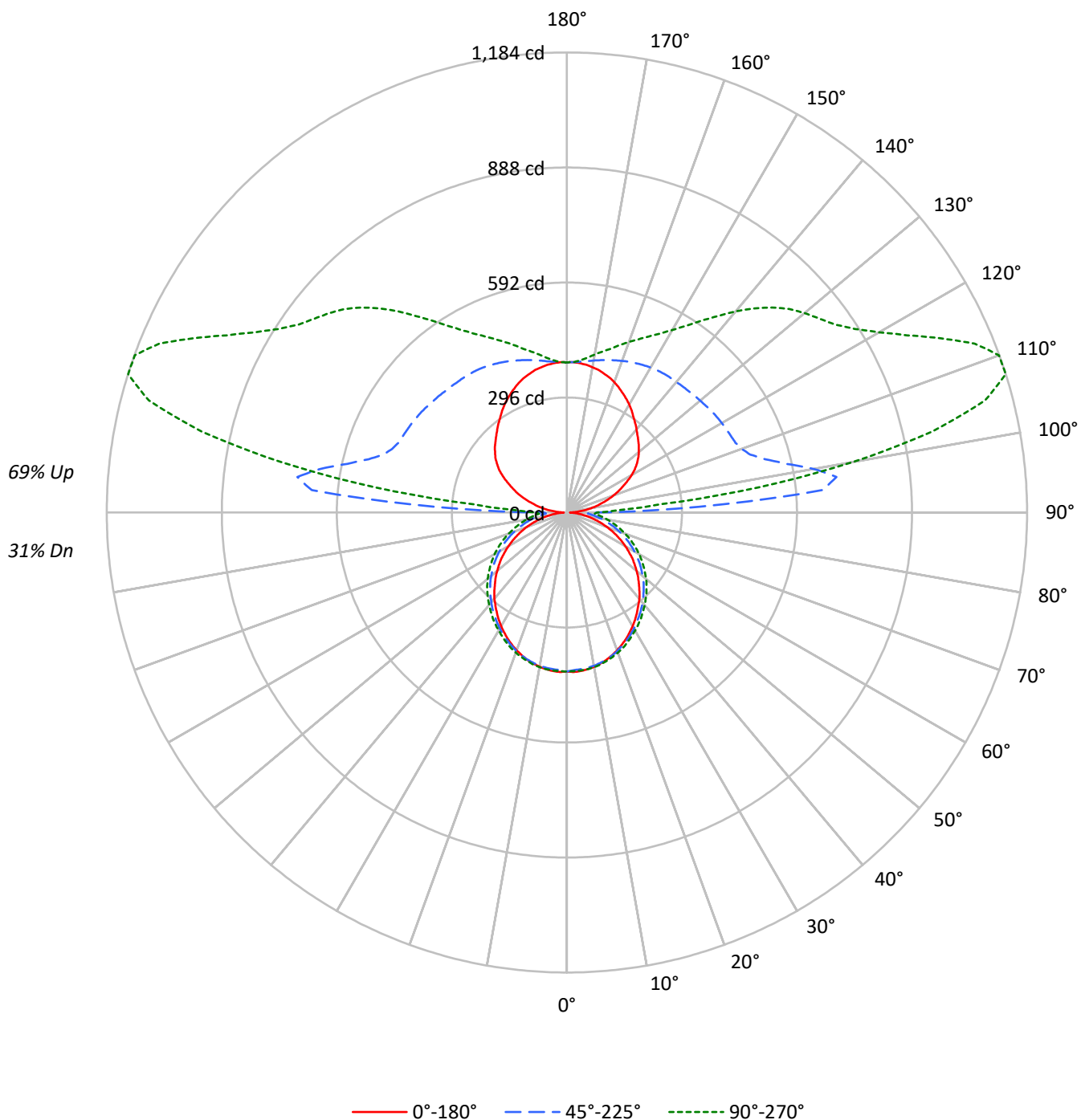
Lumens per Lamp: N/A
Luminaire Lumens: 4216.6 lumens
Efficiency: N/A
Efficacy: 123.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 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	92	92	92	92	73	73	73	55	55	55	38	38	38
1	93	88	84	81	83	79	76	73	63	60	58	47	46	44	33	32	31
2	84	77	71	65	75	69	64	59	54	51	48	41	38	36	29	27	26
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	22
4	70	59	51	45	62	53	47	41	42	37	33	32	28	26	22	20	18
5	64	53	44	39	57	47	40	35	38	32	29	28	25	22	20	18	16
6	59	47	39	33	52	42	35	30	34	29	25	26	22	19	18	16	14
7	54	42	34	29	48	38	31	26	30	25	22	23	20	17	16	14	12
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11
9	47	35	27	22	42	31	25	20	25	20	17	19	16	13	14	11	10
10	43	32	25	20	39	29	22	18	23	18	15	18	14	12	13	10	9

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	0.9
10°-20°	111.1	2.6
20°-30°	168.0	4.0
30°-40°	203.2	4.8
40°-50°	214.8	5.1
50°-60°	202.2	4.8
60°-70°	167.7	4.0
70°-80°	117.7	2.8
80°-90°	67.9	1.6
90°-100°	326.6	7.7
100°-110°	613.1	14.5
110°-120°	540.0	12.8
120°-130°	448.2	10.6
130°-140°	369.6	8.8
140°-150°	279.5	6.6
150°-160°	195.8	4.6
160°-170°	115.2	2.7
170°-180°	37.4	0.9
0°-30°	317.8	7.5
0°-40°	521.0	12.4
0°-60°	938.0	22.2
0°-90°	1291.3	30.6
90°-120°	1479.6	35.1
90°-150°	2576.9	61.1
90°-180°	2925.0	69.4
0°-180°	4216.6	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	32	59	74	78	7
95°	31	100	659	359	242	32
105°	93	142	528	1114	1114	99
115°	159	203	466	885	1060	158
125°	220	260	455	748	843	196
135°	260	309	442	656	746	201
145°	299	342	436	546	602	188
155°	339	366	424	480	500	157
165°	370	381	406	430	436	104
175°	386	386	390	395	393	37
180°	386	386	386	386	386	

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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°	8.1	31.8	59.1	73.8	78.2
92.5°	17.5	81.4	340.2	153.7	128.2
95°	31.1	100.1	658.6	358.6	241.6
97.5°	47.3	106.1	699.6	675.1	498.5
100°	62.7	115.6	645.2	912.7	746.6
102.5°	77.9	127.4	578.4	1060.2	962.9
105°	92.9	142.0	528.2	1114.0	1113.6
107.5°	110.4	157.3	494.8	1094.7	1183.7
110°	127.4	172.2	478.6	1031.2	1182.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	143.7	187.4	469.4	954.0	1135.4
115°	159.1	203.2	465.6	885.0	1060.5
117.5°	175.8	218.0	462.6	829.8	987.6
120°	192.1	232.2	460.4	791.8	927.2
122.5°	207.3	246.4	457.3	766.3	878.8
125°	219.7	260.3	454.7	747.7	842.7
127.5°	231.8	273.9	450.8	729.4	819.2
130°	241.3	286.7	447.8	708.5	798.1
132.5°	251.2	298.2	445.2	684.2	775.4
135°	259.8	309.2	442.2	656.0	746.1
137.5°	268.9	318.2	440.4	626.4	712.2
140°	278.8	327.0	438.2	597.6	675.8
142.5°	289.0	335.0	437.3	571.0	637.0
145°	298.9	341.6	435.8	546.3	602.1
147.5°	310.3	348.5	433.5	525.5	569.4
150°	320.9	354.9	431.2	507.9	542.1
152.5°	330.3	361.0	427.4	493.5	519.3
155°	339.4	366.3	423.6	479.8	500.3
157.5°	348.5	371.2	419.8	466.9	482.8
160°	356.8	375.4	415.3	454.0	466.9
162.5°	364.4	378.8	410.7	441.4	451.7
165°	369.7	381.1	406.2	430.1	436.5
167.5°	375.8	383.0	401.6	420.2	424.4
170°	379.6	384.5	397.1	410.4	413.0
172.5°	383.4	385.6	392.5	401.6	401.6
175°	385.7	386.4	389.5	394.8	393.3
177.5°	387.2	386.4	387.2	389.8	387.2
180°	386.4	386.4	386.4	386.4	386.4

(END OF REPORT)