

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: P1001013

Luminaire Tested: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001013
REPORT IS A COMBINATION OF REPORTS P995629 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

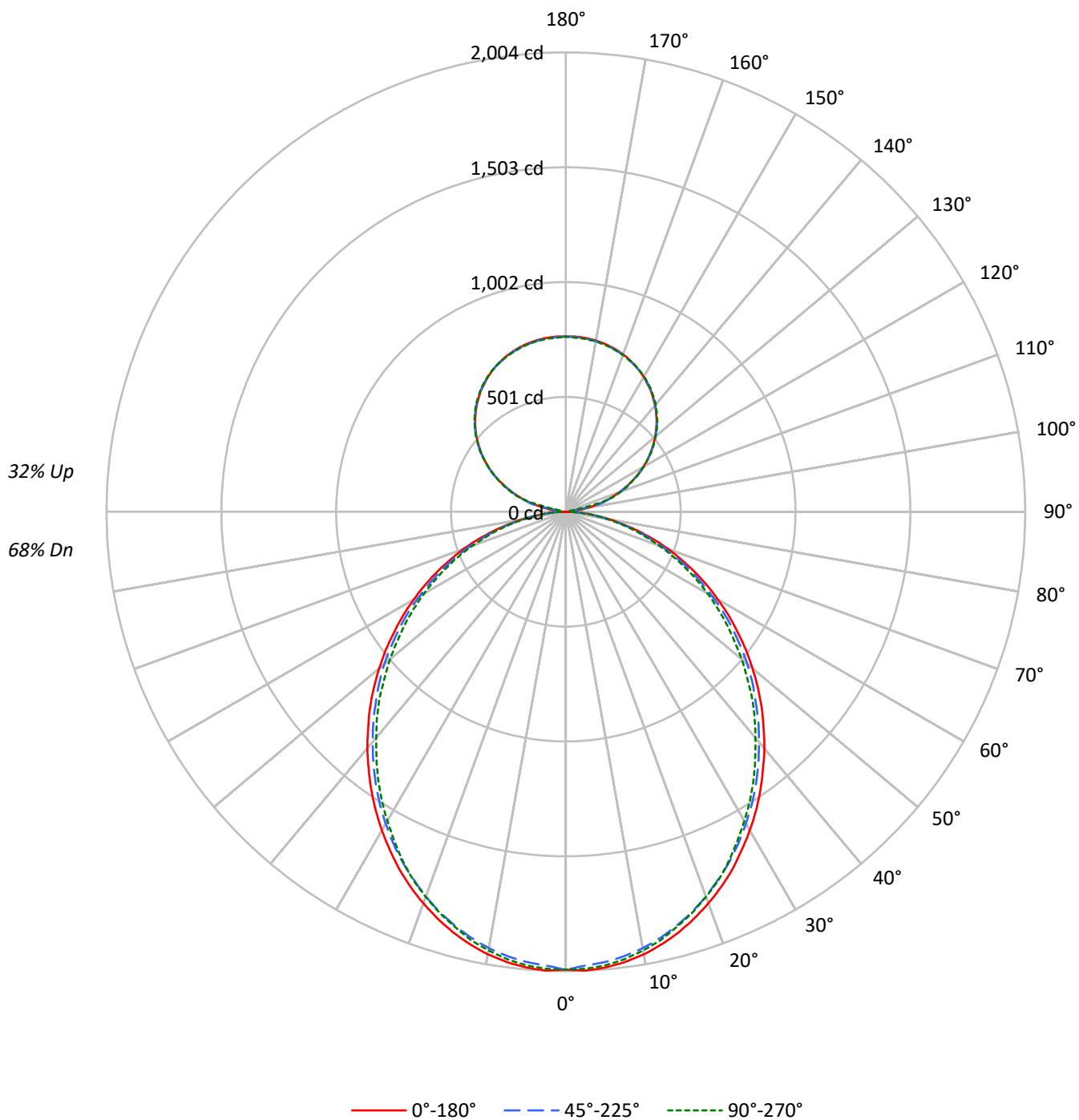
Lumens per Lamp: N/A
Luminaire Lumens: 7492.0 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 76.7
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73	68		
1	102	97	93	90	96	92	89	85	82	79	77	73	71	69	65	63	62	58		
2	93	85	79	73	87	81	75	70	72	68	64	64	61	58	57	54	52	48		
3	85	75	67	61	80	71	64	59	64	58	54	57	52	49	50	47	44	41		
4	78	66	58	52	73	63	56	50	57	51	46	51	46	42	45	41	38	35		
5	71	59	51	45	67	56	49	43	51	44	40	45	40	36	41	37	33	30		
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29	27		
7	61	48	40	34	57	46	38	33	42	35	31	37	32	28	34	29	26	24		
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23	21		
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	24	21	19		
10	49	37	29	25	47	35	28	24	32	26	22	29	24	21	27	22	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16285	16285	16285
5°	16299	15817	15836
10°	16161	15378	15270
15°	15929	14856	14632
20°	15633	14291	13971
25°	15300	13695	13259
30°	14899	13050	12478
35°	14482	12389	11722
40°	14048	11678	10919
45°	13593	10965	10169
50°	13090	10275	9337
55°	12542	9467	8511
60°	11982	8583	7650
65°	11341	7671	6681
70°	10604	6572	5643
75°	9501	5298	4518
80°	8094	3829	3178
85°	6287	2132	1710

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13593 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	2.5
10°-20°	530.3	7.1
20°-30°	780.5	10.4
30°-40°	907.3	12.1
40°-50°	907.2	12.1
50°-60°	793.4	10.6
60°-70°	589.1	7.9
70°-80°	334.2	4.5
80°-90°	97.3	1.3
90°-100°	25.4	0.3
100°-110°	167.0	2.2
110°-120°	319.0	4.3
120°-130°	404.9	5.4
130°-140°	433.2	5.8
140°-150°	405.0	5.4
150°-160°	326.6	4.4
160°-170°	210.7	2.8
170°-180°	72.6	1.0
0°-30°	1499.1	20.0
0°-40°	2406.3	32.1
0°-60°	4107.0	54.8
0°-90°	5127.6	68.4
90°-120°	511.4	6.8
90°-150°	1754.5	23.4
90°-180°	2364.0	31.6
0°-180°	7492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1997	1997	1997	1997	1997	
5°	1996	1989	1972	1989	1986	189
15°	1900	1893	1869	1879	1874	535
25°	1720	1709	1687	1688	1682	792
35°	1480	1469	1447	1435	1427	926
45°	1208	1197	1171	1154	1149	931
55°	914	909	886	867	858	818
65°	619	611	595	579	571	613
75°	330	322	314	307	306	350
85°	86	86	83	83	82	93
90°	2	8	13	16	17	7
95°	31	12	13	16	17	39
105°	172	176	178	184	163	180
115°	321	323	322	324	324	316
125°	452	454	453	454	455	403
135°	560	560	562	563	564	432
145°	646	648	648	648	649	404
155°	708	709	707	709	708	327
165°	747	744	744	749	744	211
175°	764	761	761	766	760	73
180°	764	764	764	764	764	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1997.1	1997.1	1997.1	1997.1	1997.1
2.5°	2003.5	1998.7	1981.1	1997.1	1995.5
5°	1995.5	1989.1	1971.5	1989.1	1985.9
7.5°	1981.1	1974.7	1955.5	1969.9	1968.3
10°	1960.3	1953.9	1933.1	1945.9	1942.7
12.5°	1933.1	1926.7	1904.3	1918.7	1913.9
15°	1899.5	1893.1	1869.1	1878.7	1873.9
17.5°	1861.1	1853.1	1830.7	1837.1	1833.9
20°	1817.9	1809.9	1785.9	1790.7	1787.5
22.5°	1771.5	1760.3	1736.3	1745.9	1739.5
25°	1720.3	1709.1	1686.7	1688.3	1681.9
27.5°	1662.7	1651.5	1630.7	1627.5	1619.5
30°	1605.1	1592.3	1571.5	1565.1	1557.1
32.5°	1544.2	1533.0	1510.6	1502.6	1494.6
35°	1480.2	1469.0	1446.6	1435.4	1427.4
37.5°	1413.0	1403.4	1379.4	1368.2	1357.0
40°	1347.4	1334.6	1310.6	1294.6	1286.6
42.5°	1277.0	1270.6	1243.4	1224.2	1219.4
45°	1208.2	1197.0	1171.4	1153.8	1149.0
47.5°	1136.2	1128.2	1104.2	1085.0	1072.2
50°	1062.6	1056.2	1033.8	1011.4	1001.8
52.5°	990.6	982.6	958.6	939.4	926.5
55°	913.7	908.9	886.5	867.3	857.7
57.5°	841.7	836.9	814.5	795.3	785.7
60°	766.5	758.5	737.7	723.3	715.3
62.5°	692.9	686.5	664.1	651.3	643.3
65°	619.3	611.3	595.3	579.3	571.3
67.5°	544.1	537.7	521.7	505.7	504.1
70°	475.3	464.1	451.3	438.5	433.7
72.5°	401.7	390.5	380.9	371.3	366.5
75°	329.7	321.7	313.7	307.2	305.6
77.5°	259.2	256.0	248.0	246.4	241.6
80°	196.8	192.0	188.8	185.6	184.0
82.5°	136.0	134.4	134.4	132.8	131.2
85°	86.4	86.4	83.2	83.2	81.6
87.5°	41.6	40.0	38.4	38.4	38.4
90°	1.7	8.0	12.6	16.0	17.1
92.5°	8.6	7.4	12.0	15.4	15.4
95°	31.4	12.0	12.6	16.0	16.6
97.5°	60.0	72.6	12.6	15.4	16.0
100°	93.7	104.0	25.1	15.4	16.0
102.5°	131.4	138.3	145.2	16.6	16.6
105°	172.0	175.5	178.3	183.5	162.9
107.5°	209.2	210.9	214.9	217.7	220.0
110°	246.9	248.6	252.0	253.2	254.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	283.5	286.9	288.0	287.5	289.8
115°	321.2	322.9	322.3	323.5	323.5
117.5°	354.9	357.2	358.9	358.3	358.3
120°	389.2	391.5	390.9	392.1	390.9
122.5°	421.2	422.3	423.5	424.1	422.9
125°	451.5	453.8	452.6	454.4	454.9
127.5°	480.6	481.2	484.1	483.5	482.9
130°	508.6	509.2	510.9	511.5	511.5
132.5°	534.4	535.5	537.8	538.4	537.8
135°	560.1	559.5	561.8	562.9	564.1
137.5°	582.9	582.9	585.8	586.9	586.4
140°	605.2	606.4	607.5	609.2	609.8
142.5°	625.2	627.5	628.1	629.2	629.2
145°	645.8	647.5	647.5	648.1	649.2
147.5°	661.8	665.2	664.7	665.2	665.8
150°	679.5	681.8	681.2	681.2	681.8
152.5°	694.4	696.1	695.0	696.1	695.5
155°	708.1	708.7	707.0	709.2	707.5
157.5°	720.1	720.1	717.8	720.7	717.8
160°	730.4	728.7	728.1	731.5	728.1
162.5°	739.5	737.2	736.7	740.1	736.1
165°	747.0	744.1	744.1	748.7	743.5
167.5°	753.3	750.4	749.8	755.0	749.2
170°	758.4	755.0	755.5	760.1	754.4
172.5°	761.8	758.4	759.0	763.5	757.3
175°	764.1	760.7	761.3	766.4	759.5
177.5°	765.8	761.8	763.0	767.5	760.7
180°	764.1	764.1	764.1	764.1	764.1

(END OF REPORT)