

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: P1001015

Luminaire Tested: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001015
REPORT IS A COMBINATION OF REPORTS P995631 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-F4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

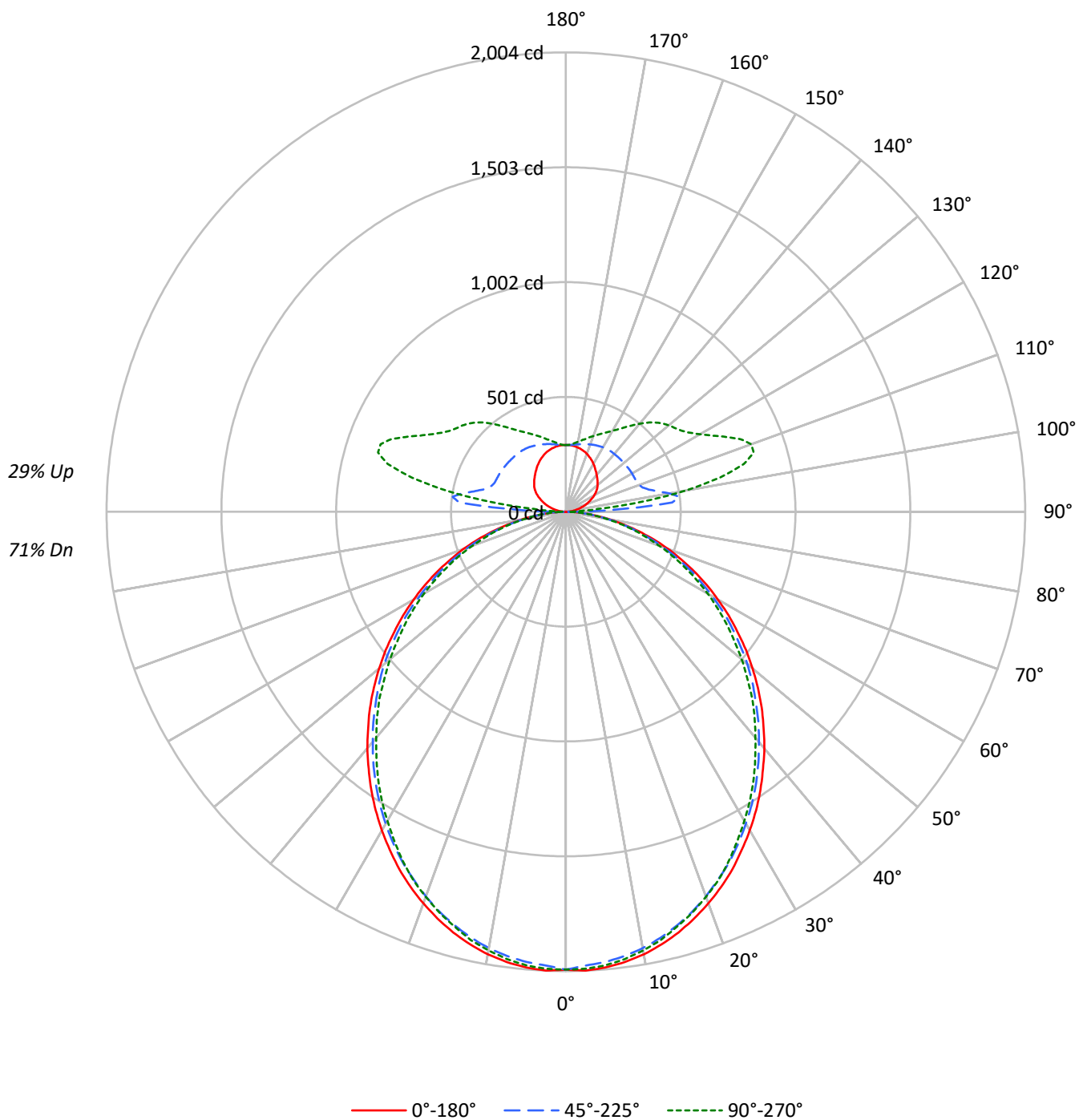
Lumens per Lamp: N/A
Luminaire Lumens: 7250.2 lumens
Efficiency: N/A
Efficacy: 94.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

TEST NUMBER: P1001015

CATALOG NUMBER: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F4

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	75	75	75
1	102	98	94	90	97	93	89	86	83	81	78	74	72	70	66	65	63
2	93	86	79	74	88	81	75	71	73	68	65	65	62	59	58	56	53
3	85	75	68	61	80	71	65	59	64	59	54	58	54	50	52	48	45
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	46	42	39
5	72	60	51	45	68	57	49	43	51	45	40	46	41	37	42	38	34
6	66	54	45	39	62	51	43	38	46	40	35	42	37	33	38	34	30
7	61	48	40	34	58	46	39	33	42	36	31	38	33	29	35	30	27
8	57	44	36	31	54	42	35	30	39	32	28	35	30	26	32	27	24
9	53	40	33	27	50	39	32	27	35	29	25	32	27	23	29	25	22
10	50	37	30	25	47	36	29	24	33	27	23	30	25	21	27	23	20

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

TEST NUMBER: P1001015

CATALOG NUMBER: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	188.2	2.6
10°-20°	530.3	7.3
20°-30°	780.5	10.8
30°-40°	907.3	12.5
40°-50°	907.2	12.5
50°-60°	793.4	10.9
60°-70°	589.1	8.1
70°-80°	334.2	4.6
80°-90°	96.8	1.3
90°-100°	216.1	3.0
100°-110°	439.5	6.1
110°-120°	391.8	5.4
120°-130°	329.1	4.5
130°-140°	274.6	3.8
140°-150°	209.7	2.9
150°-160°	147.4	2.0
160°-170°	86.7	1.2
170°-180°	28.2	0.4
0°-30°	1499.1	20.7
0°-40°	2406.3	33.2
0°-60°	4107.0	56.6
0°-90°	5127.1	70.7
90°-120°	1047.4	14.4
90°-150°	1860.8	25.7
90°-180°	2123.0	29.3
0°-180°	7250.2	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°	1	5	10	11	12	7
95°	19	59	466	231	140	21
105°	67	97	375	807	804	71
115°	118	148	334	642	772	117
125°	164	195	333	547	616	146
135°	195	232	330	485	551	151
145°	225	257	328	409	450	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

TEST NUMBER: P1001015

CATALOG NUMBER: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F4

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°	0.6	4.6	10.3	11.4	12.0
92.5°	8.0	44.0	224.0	74.1	52.0
95°	18.9	59.4	465.8	230.6	139.5
97.5°	31.4	65.7	498.4	471.0	334.9
100°	43.4	74.3	459.5	651.6	524.1
102.5°	54.9	84.6	410.9	764.8	688.7
105°	66.9	96.9	374.9	807.3	804.2
107.5°	80.0	109.4	351.5	794.5	859.0
110°	93.2	122.0	340.6	748.8	860.2

TEST NUMBER: P1001015

CATALOG NUMBER: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.7	134.6	335.5	692.8	826.5
115°	117.7	147.8	334.4	642.4	772.2
117.5°	130.3	160.0	333.8	603.0	719.0
120°	142.9	172.0	333.8	576.4	675.6
122.5°	154.3	183.8	333.2	559.0	641.3
125°	164.0	194.9	332.6	546.7	616.1
127.5°	173.2	205.2	331.5	535.0	600.1
130°	180.6	215.2	330.9	521.0	586.4
132.5°	188.0	223.8	330.4	504.4	571.0
135°	194.9	232.0	329.8	485.2	551.0
137.5°	201.8	239.2	329.8	464.6	527.5
140°	209.2	245.8	329.2	444.7	501.8
142.5°	217.2	251.8	329.2	426.1	474.4
145°	224.6	257.2	328.1	409.2	449.8
147.5°	233.2	262.4	326.4	395.2	427.0
150°	241.2	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)