

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: P1000991

Luminaire Tested: SA4XXDIP-B1195D590UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000991
REPORT IS A COMBINATION OF REPORTS P995607 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB27-4F0-XX-W2A-F4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

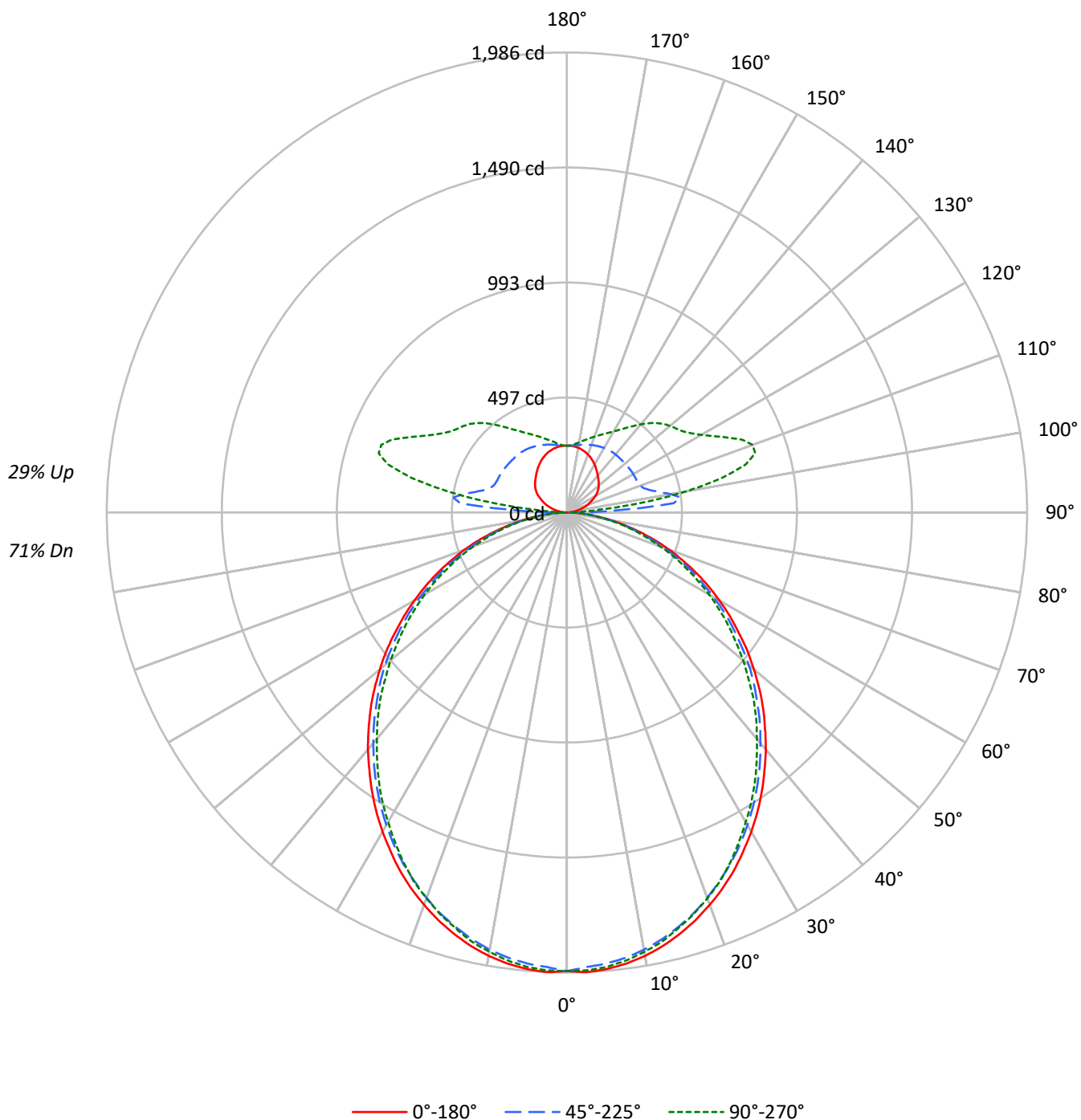
Lumens per Lamp: N/A
Luminaire Lumens: 7188.2 lumens
Efficiency: N/A
Efficacy: 93.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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				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°	16146	16146	16146
5°	16159	15681	15700
10°	16022	15246	15139
15°	15792	14729	14506
20°	15499	14169	13850
25°	15168	13577	13145
30°	14770	12938	12371
35°	14357	12282	11622
40°	13928	11578	10826
45°	13476	10871	10081
50°	12977	10186	9257
55°	12435	9386	8438
60°	11879	8510	7585
65°	11244	7605	6624
70°	10512	6515	5593
75°	9418	5252	4480
80°	8024	3797	3151
85°	6236	2114	1696

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13476 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.6	2.6
10°-20°	525.8	7.3
20°-30°	773.8	10.8
30°-40°	899.5	12.5
40°-50°	899.4	12.5
50°-60°	786.6	10.9
60°-70°	584.0	8.1
70°-80°	331.4	4.6
80°-90°	96.0	1.3
90°-100°	214.3	3.0
100°-110°	435.8	6.1
110°-120°	388.4	5.4
120°-130°	326.3	4.5
130°-140°	272.3	3.8
140°-150°	207.9	2.9
150°-160°	146.2	2.0
160°-170°	86.0	1.2
170°-180°	28.0	0.4
0°-30°	1486.2	20.7
0°-40°	2385.7	33.2
0°-60°	4071.7	56.6
0°-90°	5083.1	70.7
90°-120°	1038.5	14.4
90°-150°	1845.0	25.7
90°-180°	2105.0	29.3
0°-180°	7188.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1980	1980	1980	1980	1980	
5°	1978	1972	1955	1972	1969	188
15°	1883	1877	1853	1863	1858	531
25°	1706	1694	1672	1674	1667	785
35°	1468	1456	1434	1423	1415	918
45°	1198	1187	1161	1144	1139	923
55°	906	901	879	860	850	811
65°	614	606	590	574	566	608
75°	327	319	311	305	303	347
85°	86	86	82	82	81	92
90°	1	4	10	11	12	7
95°	19	59	462	229	138	21
105°	66	96	372	800	797	71
115°	117	146	332	637	766	116
125°	163	193	330	542	611	145
135°	193	230	327	481	546	149
145°	223	255	325	406	446	140
155°	253	273	316	358	374	117
165°	276	284	303	321	326	78
175°	288	288	291	295	294	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1980.0	1980.0	1980.0	1980.0	1980.0
2.5°	1986.3	1981.6	1964.1	1980.0	1978.4
5°	1978.4	1972.0	1954.6	1972.0	1968.9
7.5°	1964.1	1957.8	1938.7	1953.0	1951.4
10°	1943.5	1937.1	1916.5	1929.2	1926.0
12.5°	1916.5	1910.2	1888.0	1902.2	1897.5
15°	1883.2	1876.9	1853.1	1862.6	1857.8
17.5°	1845.1	1837.2	1815.0	1821.3	1818.2
20°	1802.3	1794.4	1770.6	1775.3	1772.1
22.5°	1756.3	1745.2	1721.4	1730.9	1724.5
25°	1705.5	1694.4	1672.2	1673.8	1667.4
27.5°	1648.4	1637.3	1616.7	1613.5	1605.6
30°	1591.3	1578.6	1558.0	1551.6	1543.7
32.5°	1531.0	1519.9	1497.7	1489.7	1481.8
35°	1467.5	1456.4	1434.2	1423.1	1415.2
37.5°	1400.9	1391.4	1367.6	1356.5	1345.4
40°	1335.9	1323.2	1299.4	1283.5	1275.6
42.5°	1266.0	1259.7	1232.7	1213.7	1208.9
45°	1197.8	1186.7	1161.3	1143.9	1139.1
47.5°	1126.4	1118.5	1094.7	1075.7	1063.0
50°	1053.4	1047.1	1024.9	1002.7	993.2
52.5°	982.1	974.1	950.3	931.3	918.6
55°	905.9	901.1	878.9	859.9	850.4
57.5°	834.5	829.8	807.5	788.5	779.0
60°	759.9	752.0	731.4	717.1	709.2
62.5°	687.0	680.6	658.4	645.7	637.8
65°	614.0	606.1	590.2	574.3	566.4
67.5°	539.4	533.1	517.2	501.3	499.8
70°	471.2	460.1	447.4	434.7	429.9
72.5°	398.2	387.1	377.6	368.1	363.3
75°	326.8	318.9	311.0	304.6	303.0
77.5°	257.0	253.8	245.9	244.3	239.6
80°	195.1	190.4	187.2	184.0	182.4
82.5°	134.9	133.3	133.3	131.7	130.1
85°	85.7	85.7	82.5	82.5	80.9
87.5°	41.2	39.7	38.1	38.1	38.1
90°	0.6	4.5	10.2	11.3	11.9
92.5°	7.9	43.6	222.1	73.4	51.6
95°	18.7	58.9	461.9	228.6	138.3
97.5°	31.2	65.2	494.2	467.0	332.1
100°	43.1	73.6	455.6	646.0	519.7
102.5°	54.4	83.9	407.5	758.2	682.9
105°	66.3	96.0	371.8	800.4	797.4
107.5°	79.3	108.5	348.5	787.7	851.8
110°	92.4	121.0	337.8	742.4	852.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	104.8	133.4	332.7	686.8	819.5
115°	116.7	146.4	331.5	637.0	765.6
117.5°	129.2	158.6	331.0	597.9	712.9
120°	141.7	170.6	331.0	571.5	669.8
122.5°	153.0	182.2	330.4	554.2	635.8
125°	162.6	193.2	329.8	542.0	610.9
127.5°	171.7	203.4	328.7	530.4	595.0
130°	179.1	213.4	328.1	516.6	581.4
132.5°	186.4	221.8	327.6	500.1	566.1
135°	193.2	230.0	327.0	481.2	546.3
137.5°	200.0	237.2	327.0	460.8	523.1
140°	207.4	243.7	326.4	440.9	497.6
142.5°	215.3	249.6	326.4	422.5	470.4
145°	222.7	255.0	325.3	405.8	446.0
147.5°	231.2	260.1	323.6	391.9	423.3
150°	239.1	264.9	321.9	379.1	404.6
152.5°	246.5	269.5	319.1	368.4	387.6
155°	253.3	273.4	316.2	358.2	373.5
157.5°	260.1	277.1	313.4	348.5	360.4
160°	266.4	280.2	310.0	338.9	348.5
162.5°	272.0	282.8	306.6	329.6	337.2
165°	276.0	284.5	303.2	321.0	325.9
167.5°	280.5	285.9	299.8	313.6	316.8
170°	283.4	287.0	296.4	306.4	308.3
172.5°	286.2	287.9	293.0	299.8	299.8
175°	287.9	288.5	290.7	294.7	293.6
177.5°	289.0	288.5	289.0	291.0	289.0
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)