

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: P1000989

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000989
REPORT IS A COMBINATION OF REPORTS P995605 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB27-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

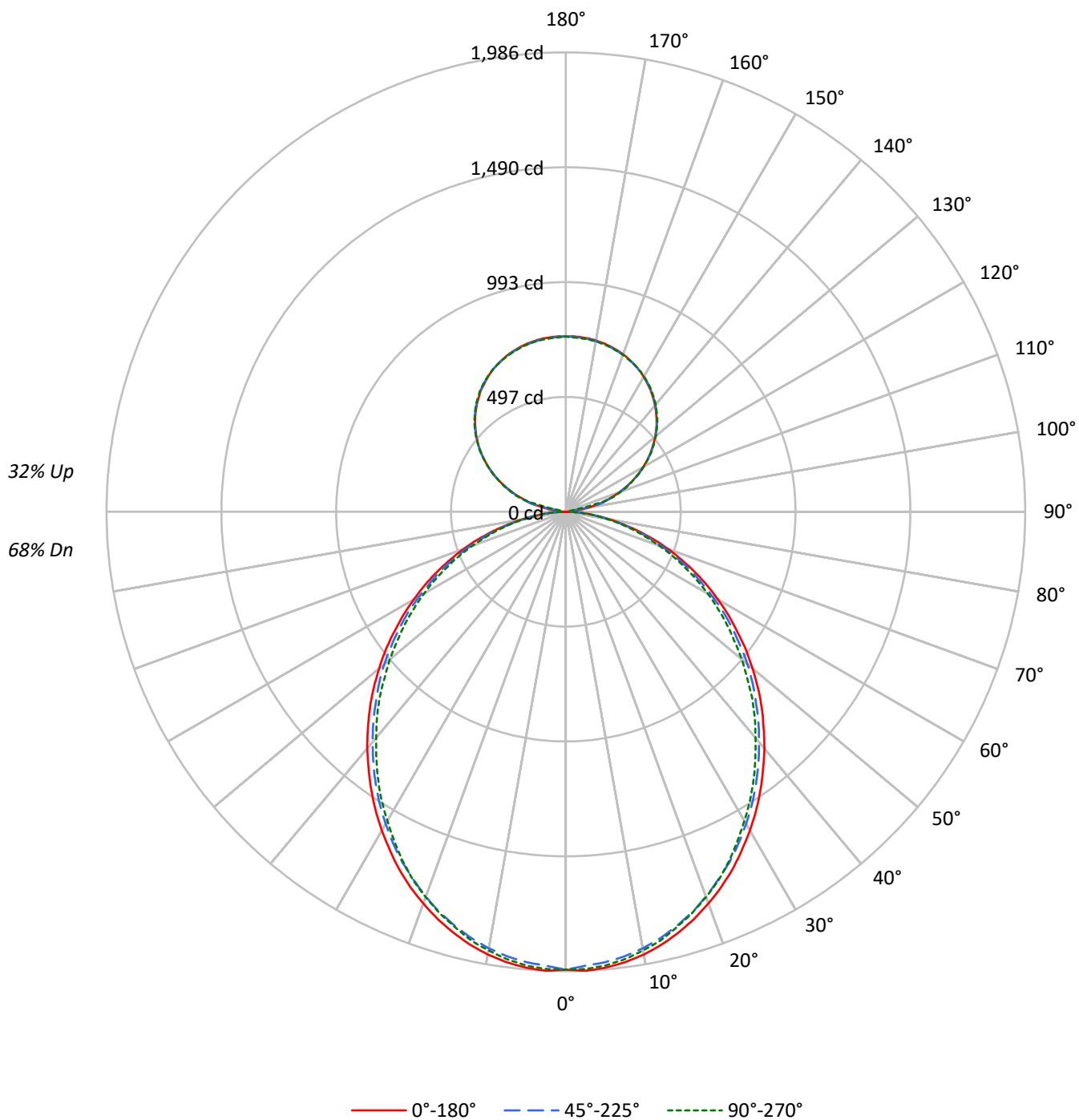
Lumens per Lamp: N/A
Luminaire Lumens: 7428.0 lumens
Efficiency: N/A
Efficacy: 96.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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

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	2.5
10°-20°	525.8	7.1
20°-30°	773.8	10.4
30°-40°	899.5	12.1
40°-50°	899.4	12.1
50°-60°	786.6	10.6
60°-70°	584.0	7.9
70°-80°	331.4	4.5
80°-90°	96.5	1.3
90°-100°	25.2	0.3
100°-110°	165.6	2.2
110°-120°	316.3	4.3
120°-130°	401.5	5.4
130°-140°	429.5	5.8
140°-150°	401.6	5.4
150°-160°	323.9	4.4
160°-170°	208.9	2.8
170°-180°	72.0	1.0
0°-30°	1486.2	20.0
0°-40°	2385.7	32.1
0°-60°	4071.7	54.8
0°-90°	5083.6	68.4
90°-120°	507.0	6.8
90°-150°	1739.7	23.4
90°-180°	2344.0	31.6
0°-180°	7428.0	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°	2	8	12	16	17	7
95°	31	12	12	16	16	38
105°	171	174	177	182	162	179
115°	318	320	320	321	321	313
125°	448	450	449	450	451	400
135°	555	555	557	558	559	428
145°	640	642	642	643	644	400
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

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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°	1.7	7.9	12.5	15.9	17.0
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.2	11.9	12.5	15.9	16.4
97.5°	59.5	72.0	12.5	15.3	15.9
100°	92.9	103.1	24.9	15.3	15.9
102.5°	130.3	137.1	143.9	16.4	16.4
105°	170.6	174.0	176.8	181.9	161.5
107.5°	207.4	209.1	213.1	215.9	218.2
110°	244.8	246.5	249.9	251.0	252.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.1	284.5	285.6	285.0	287.3
115°	318.5	320.2	319.6	320.7	320.7
117.5°	351.9	354.2	355.9	355.3	355.3
120°	385.9	388.2	387.6	388.7	387.6
122.5°	417.6	418.8	419.9	420.5	419.3
125°	447.7	449.9	448.8	450.5	451.1
127.5°	476.6	477.1	480.0	479.4	478.8
130°	504.3	504.9	506.6	507.2	507.2
132.5°	529.8	531.0	533.2	533.8	533.2
135°	555.3	554.8	557.0	558.2	559.3
137.5°	578.0	578.0	580.8	582.0	581.4
140°	600.1	601.2	602.4	604.1	604.6
142.5°	619.9	622.2	622.8	623.9	623.9
145°	640.3	642.0	642.0	642.6	643.7
147.5°	656.2	659.6	659.0	659.6	660.2
150°	673.8	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)