

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: P1001049

Luminaire Tested: SA4XXDIP-B1195D810UB27-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001049
REPORT IS A COMBINATION OF REPORTS P995665 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D810UB27-4F0-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

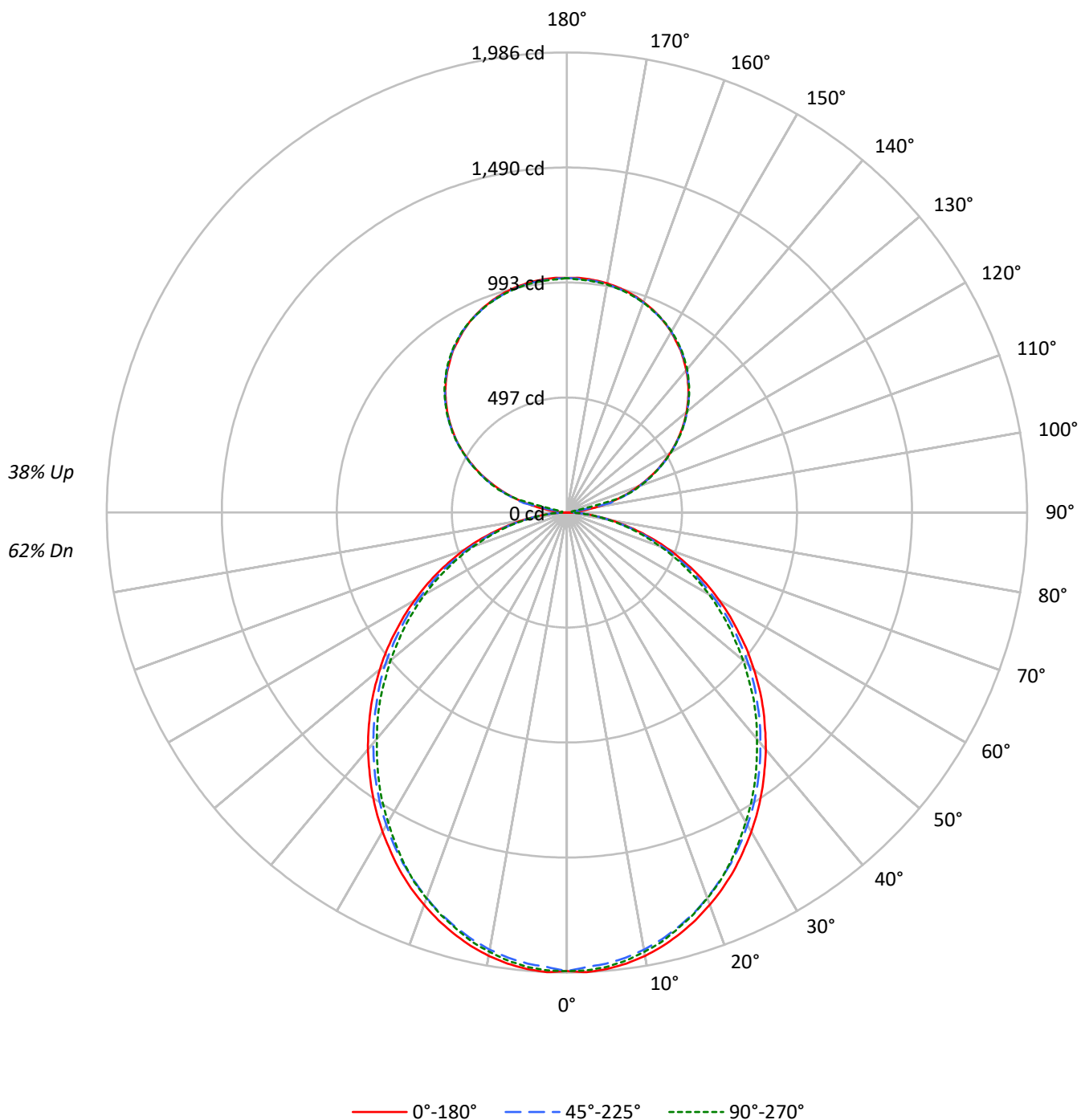
Lumens per Lamp: N/A
Luminaire Lumens: 8216.0 lumens
Efficiency: N/A
Efficacy: 99.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 82.4
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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	87	83	79	76	74	69	67	65	59	58	57
2	91	84	78	72	85	79	73	68	69	65	61	60	57	54	52	50	48
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	41
4	76	65	57	51	71	61	54	49	54	48	44	48	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	34	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	49	37	30	26	33	28	23	30	25	21	26	22	19
10	48	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18

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	2.3
10°-20°	525.8	6.4
20°-30°	773.8	9.4
30°-40°	899.5	10.9
40°-50°	899.4	10.9
50°-60°	786.6	9.6
60°-70°	584.0	7.1
70°-80°	331.4	4.0
80°-90°	97.0	1.2
90°-100°	33.6	0.4
100°-110°	221.3	2.7
110°-120°	422.5	5.1
120°-130°	536.4	6.5
130°-140°	573.8	7.0
140°-150°	536.5	6.5
150°-160°	432.7	5.3
160°-170°	279.0	3.4
170°-180°	96.2	1.2
0°-30°	1486.2	18.1
0°-40°	2385.7	29.0
0°-60°	4071.7	49.6
0°-90°	5084.1	61.9
90°-120°	677.4	8.2
90°-150°	2324.0	28.3
90°-180°	3132.0	38.1
0°-180°	8216.0	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	11	17	21	23	8
95°	42	16	17	21	22	51
105°	228	232	236	243	216	238
115°	425	428	427	428	428	419
125°	598	601	600	602	603	534
135°	742	741	744	746	747	572
145°	855	858	858	858	860	535
155°	938	939	936	940	937	432
165°	989	986	986	992	985	280
175°	1012	1008	1008	1015	1006	96
180°	1012	1012	1012	1012	1012	

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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°	2.3	10.6	16.7	21.2	22.7
92.5°	11.4	9.8	15.9	20.4	20.4
95°	41.6	15.9	16.7	21.2	22.0
97.5°	79.5	96.1	16.7	20.4	21.2
100°	124.2	137.8	33.3	20.4	21.2
102.5°	174.1	183.2	192.3	22.0	22.0
105°	227.9	232.4	236.2	243.0	215.8
107.5°	277.1	279.3	284.6	288.4	291.5
110°	327.0	329.3	333.8	335.4	337.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	375.5	380.0	381.5	380.8	383.8
115°	425.4	427.7	427.0	428.5	428.5
117.5°	470.1	473.1	475.4	474.7	474.7
120°	515.5	518.6	517.8	519.3	517.8
122.5°	557.9	559.4	561.0	561.7	560.2
125°	598.0	601.1	599.6	601.8	602.6
127.5°	636.7	637.4	641.2	640.4	639.7
130°	673.7	674.5	676.8	677.5	677.5
132.5°	707.8	709.3	712.4	713.1	712.4
135°	741.9	741.1	744.2	745.7	747.2
137.5°	772.2	772.2	775.9	777.5	776.7
140°	801.7	803.2	804.7	807.0	807.7
142.5°	828.2	831.2	832.0	833.5	833.5
145°	855.4	857.7	857.7	858.5	860.0
147.5°	876.6	881.2	880.4	881.2	881.9
150°	900.1	903.1	902.4	902.4	903.1
152.5°	919.8	922.1	920.5	922.1	921.3
155°	937.9	938.7	936.4	939.5	937.2
157.5°	953.8	953.8	950.8	954.6	950.8
160°	967.5	965.2	964.4	969.0	964.4
162.5°	979.6	976.6	975.8	980.3	975.0
165°	989.4	985.6	985.6	991.7	984.9
167.5°	997.8	994.0	993.2	1000.0	992.5
170°	1004.6	1000.0	1000.8	1006.8	999.3
172.5°	1009.1	1004.6	1005.3	1011.4	1003.1
175°	1012.1	1007.6	1008.4	1015.2	1006.1
177.5°	1014.4	1009.1	1010.6	1016.7	1007.6
180°	1012.1	1012.1	1012.1	1012.1	1012.1

(END OF REPORT)