

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: P1001022

Luminaire Tested: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001022
REPORT IS A COMBINATION OF REPORTS P995638 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

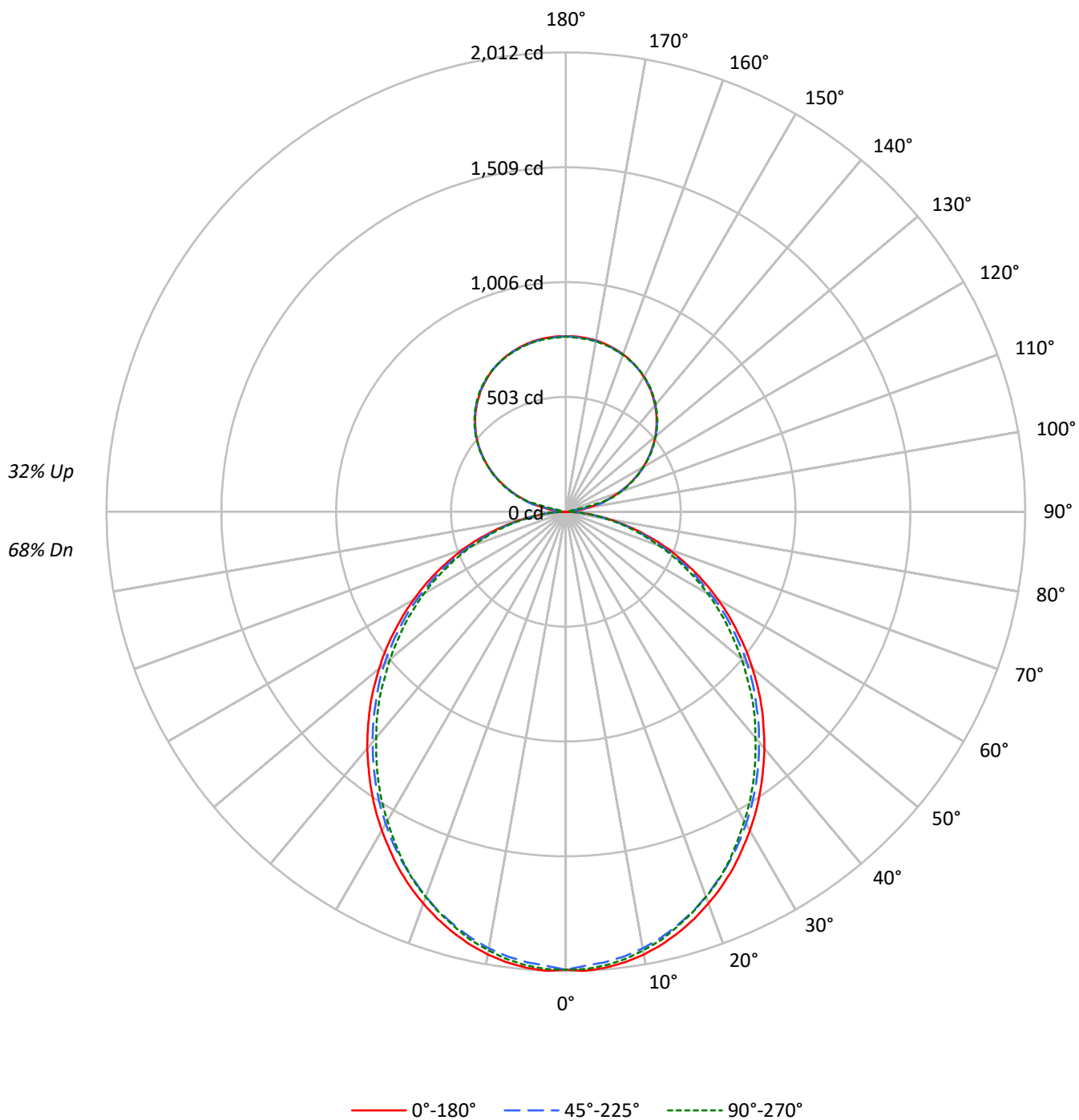
Lumens per Lamp: N/A
Luminaire Lumens: 7525.0 lumens
Efficiency: N/A
Efficacy: 98.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	16355	16355	16355
5°	16369	15885	15904
10°	16230	15444	15336
15°	15998	14919	14694
20°	15700	14353	14031
25°	15366	13753	13316
30°	14962	13105	12531
35°	14544	12442	11773
40°	14109	11728	10966
45°	13652	11012	10212
50°	13146	10318	9377
55°	12597	9508	8547
60°	12034	8620	7684
65°	11391	7704	6709
70°	10648	6599	5666
75°	9542	5320	4539
80°	8131	3845	3192
85°	6316	2142	1719

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13652 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	189.0	2.5
10°-20°	532.6	7.1
20°-30°	783.8	10.4
30°-40°	911.2	12.1
40°-50°	911.1	12.1
50°-60°	796.9	10.6
60°-70°	591.6	7.9
70°-80°	335.7	4.5
80°-90°	97.7	1.3
90°-100°	25.5	0.3
100°-110°	167.8	2.2
110°-120°	320.5	4.3
120°-130°	406.8	5.4
130°-140°	435.2	5.8
140°-150°	406.9	5.4
150°-160°	328.2	4.4
160°-170°	211.6	2.8
170°-180°	72.9	1.0
0°-30°	1505.5	20.0
0°-40°	2416.7	32.1
0°-60°	4124.6	54.8
0°-90°	5149.6	68.4
90°-120°	513.8	6.8
90°-150°	1762.7	23.4
90°-180°	2375.0	31.6
0°-180°	7525.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2006	2006	2006	2006	2006	
5°	2004	1998	1980	1998	1994	190
15°	1908	1901	1877	1887	1882	538
25°	1728	1716	1694	1696	1689	795
35°	1487	1475	1453	1442	1434	930
45°	1213	1202	1176	1159	1154	935
55°	918	913	890	871	861	822
65°	622	614	598	582	574	616
75°	331	323	315	309	307	351
85°	87	87	84	84	82	93
90°	2	8	13	16	17	7
95°	32	12	13	16	17	39
105°	173	176	179	184	164	181
115°	323	324	324	325	325	318
125°	454	456	455	456	457	405
135°	563	562	564	566	567	434
145°	649	650	650	651	652	405
155°	711	712	710	712	711	328
165°	750	748	748	752	747	212
175°	768	764	765	770	763	73
180°	768	768	768	768	768	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2005.7	2005.7	2005.7	2005.7	2005.7
2.5°	2012.1	2007.3	1989.6	2005.7	2004.1
5°	2004.1	1997.7	1980.0	1997.7	1994.4
7.5°	1989.6	1983.2	1963.9	1978.4	1976.8
10°	1968.7	1962.3	1941.4	1954.3	1951.1
12.5°	1941.4	1935.0	1912.5	1926.9	1922.1
15°	1907.7	1901.2	1877.1	1886.8	1881.9
17.5°	1869.1	1861.1	1838.6	1845.0	1841.8
20°	1825.7	1817.7	1793.6	1798.4	1795.2
22.5°	1779.1	1767.8	1743.7	1753.4	1746.9
25°	1727.7	1716.4	1693.9	1695.5	1689.1
27.5°	1669.8	1658.6	1637.7	1634.4	1626.4
30°	1611.9	1599.1	1578.2	1571.8	1563.7
32.5°	1550.9	1539.6	1517.1	1509.1	1501.1
35°	1486.6	1475.3	1452.8	1441.6	1433.6
37.5°	1419.1	1409.4	1385.3	1374.1	1362.8
40°	1353.2	1340.3	1316.2	1300.2	1292.1
42.5°	1282.5	1276.1	1248.7	1229.5	1224.6
45°	1213.4	1202.1	1176.4	1158.7	1153.9
47.5°	1141.1	1133.0	1108.9	1089.6	1076.8
50°	1067.1	1060.7	1038.2	1015.7	1006.1
52.5°	994.8	986.8	962.7	943.4	930.5
55°	917.7	912.8	890.3	871.1	861.4
57.5°	845.3	840.5	818.0	798.7	789.1
60°	769.8	761.8	740.9	726.4	718.4
62.5°	695.9	689.5	667.0	654.1	646.1
65°	622.0	613.9	597.9	581.8	573.7
67.5°	546.4	540.0	523.9	507.9	506.2
70°	477.3	466.1	453.2	440.4	435.5
72.5°	403.4	392.1	382.5	372.9	368.0
75°	331.1	323.0	315.0	308.6	307.0
77.5°	260.4	257.1	249.1	247.5	242.7
80°	197.7	192.9	189.6	186.4	184.8
82.5°	136.6	135.0	135.0	133.4	131.8
85°	86.8	86.8	83.6	83.6	82.0
87.5°	41.8	40.2	38.6	38.6	38.6
90°	1.7	8.0	12.6	16.1	17.2
92.5°	8.6	7.5	12.1	15.5	15.5
95°	31.6	12.1	12.6	16.1	16.7
97.5°	60.3	72.9	12.6	15.5	16.1
100°	94.2	104.5	25.3	15.5	16.1
102.5°	132.1	138.9	145.8	16.7	16.7
105°	172.8	176.3	179.1	184.3	163.6
107.5°	210.1	211.9	215.9	218.8	221.1
110°	248.0	249.8	253.2	254.4	256.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	284.8	288.2	289.4	288.8	291.1
115°	322.7	324.4	323.8	325.0	325.0
117.5°	356.6	358.9	360.6	360.0	360.0
120°	391.0	393.3	392.7	393.9	392.7
122.5°	423.2	424.3	425.5	426.0	424.9
125°	453.6	455.9	454.7	456.5	457.0
127.5°	482.9	483.4	486.3	485.7	485.2
130°	511.0	511.6	513.3	513.9	513.9
132.5°	536.8	538.0	540.3	540.9	540.3
135°	562.7	562.1	564.4	565.6	566.7
137.5°	585.7	585.7	588.5	589.7	589.1
140°	608.0	609.2	610.3	612.1	612.6
142.5°	628.1	630.4	631.0	632.2	632.2
145°	648.8	650.5	650.5	651.1	652.3
147.5°	664.9	668.3	667.8	668.3	668.9
150°	682.7	685.0	684.4	684.4	685.0
152.5°	697.6	699.3	698.2	699.3	698.8
155°	711.4	712.0	710.2	712.5	710.8
157.5°	723.5	723.5	721.2	724.0	721.2
160°	733.8	732.1	731.5	734.9	731.5
162.5°	743.0	740.7	740.1	743.5	739.5
165°	750.4	747.6	747.6	752.2	747.0
167.5°	756.8	753.9	753.3	758.5	752.7
170°	761.9	758.5	759.0	763.6	757.9
172.5°	765.4	761.9	762.5	767.1	760.8
175°	767.7	764.2	764.8	770.0	763.1
177.5°	769.4	765.4	766.5	771.1	764.2
180°	767.7	767.7	767.7	767.7	767.7

(END OF REPORT)