

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: P1001024

Luminaire Tested: SA4XXDIP-B1195D590UB35-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001024
REPORT IS A COMBINATION OF REPORTS P995640 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-F4
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

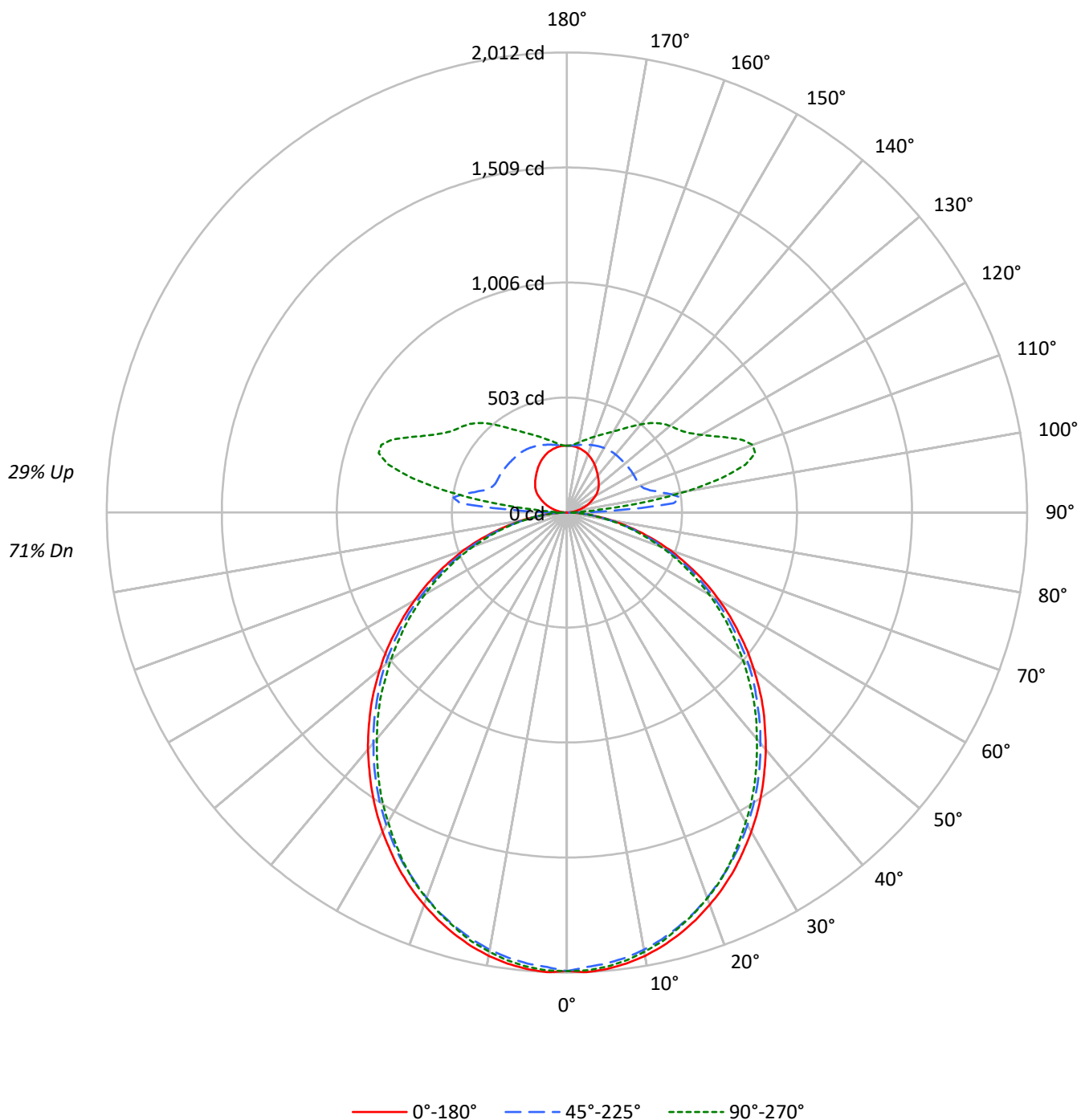
Lumens per Lamp: N/A
Luminaire Lumens: 7281.3 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	2.6
10°-20°	532.6	7.3
20°-30°	783.8	10.8
30°-40°	911.2	12.5
40°-50°	911.1	12.5
50°-60°	796.9	10.9
60°-70°	591.6	8.1
70°-80°	335.7	4.6
80°-90°	97.3	1.3
90°-100°	217.0	3.0
100°-110°	441.4	6.1
110°-120°	393.4	5.4
120°-130°	330.5	4.5
130°-140°	275.8	3.8
140°-150°	210.6	2.9
150°-160°	148.0	2.0
160°-170°	87.1	1.2
170°-180°	28.3	0.4
0°-30°	1505.5	20.7
0°-40°	2416.7	33.2
0°-60°	4124.6	56.6
0°-90°	5149.1	70.7
90°-120°	1051.9	14.4
90°-150°	1868.7	25.7
90°-180°	2132.0	29.3
0°-180°	7281.3	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°	1	5	10	12	12	7
95°	19	60	468	232	140	21
105°	67	97	376	811	808	72
115°	118	148	336	645	775	117
125°	165	196	334	549	619	147
135°	196	233	331	487	553	151
145°	226	258	330	411	452	142
155°	257	277	320	363	378	118
165°	280	288	307	325	330	79
175°	292	292	294	298	297	28
180°	292	292	292	292	292	

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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°	0.6	4.6	10.3	11.5	12.1
92.5°	8.0	44.2	225.0	74.4	52.2
95°	18.9	59.6	467.8	231.6	140.1
97.5°	31.6	66.0	500.5	473.0	336.4
100°	43.6	74.6	461.5	654.4	526.3
102.5°	55.1	84.9	412.7	768.0	691.6
105°	67.2	97.3	376.5	810.8	807.6
107.5°	80.4	109.9	353.0	797.8	862.7
110°	93.6	122.6	342.1	751.9	863.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	106.2	135.2	336.9	695.7	830.0
115°	118.2	148.4	335.8	645.2	775.4
117.5°	130.9	160.8	335.2	605.6	722.1
120°	143.5	172.8	335.2	578.8	678.4
122.5°	155.0	184.6	334.6	561.4	644.0
125°	164.7	195.8	334.1	549.0	618.8
127.5°	173.9	206.0	332.9	537.2	602.7
130°	181.4	216.1	332.3	523.2	588.9
132.5°	188.8	224.8	331.8	506.5	573.4
135°	195.7	233.0	331.2	487.4	553.3
137.5°	202.6	240.2	331.2	466.6	529.8
140°	210.1	246.8	330.6	446.6	504.0
142.5°	218.1	252.8	330.6	427.9	476.4
145°	225.6	258.3	329.5	411.0	451.7
147.5°	234.2	263.4	327.7	396.9	428.8
150°	242.2	268.4	326.0	384.0	409.8
152.5°	249.7	272.9	323.2	373.1	392.6
155°	256.6	277.0	320.3	362.8	378.3
157.5°	263.5	280.6	317.4	353.0	365.1
160°	269.8	283.8	314.0	343.2	353.0
162.5°	275.5	286.4	310.5	333.8	341.5
165°	279.5	288.2	307.1	325.2	330.0
167.5°	284.1	289.6	303.6	317.7	320.9
170°	287.0	290.8	300.2	310.2	312.2
172.5°	289.9	291.6	296.7	303.6	303.6
175°	291.6	292.2	294.5	298.5	297.3
177.5°	292.7	292.2	292.7	294.8	292.7
180°	292.2	292.2	292.2	292.2	292.2

(END OF REPORT)