

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: P1001040

Luminaire Tested: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001040
REPORT IS A COMBINATION OF REPORTS P995656 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB50-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

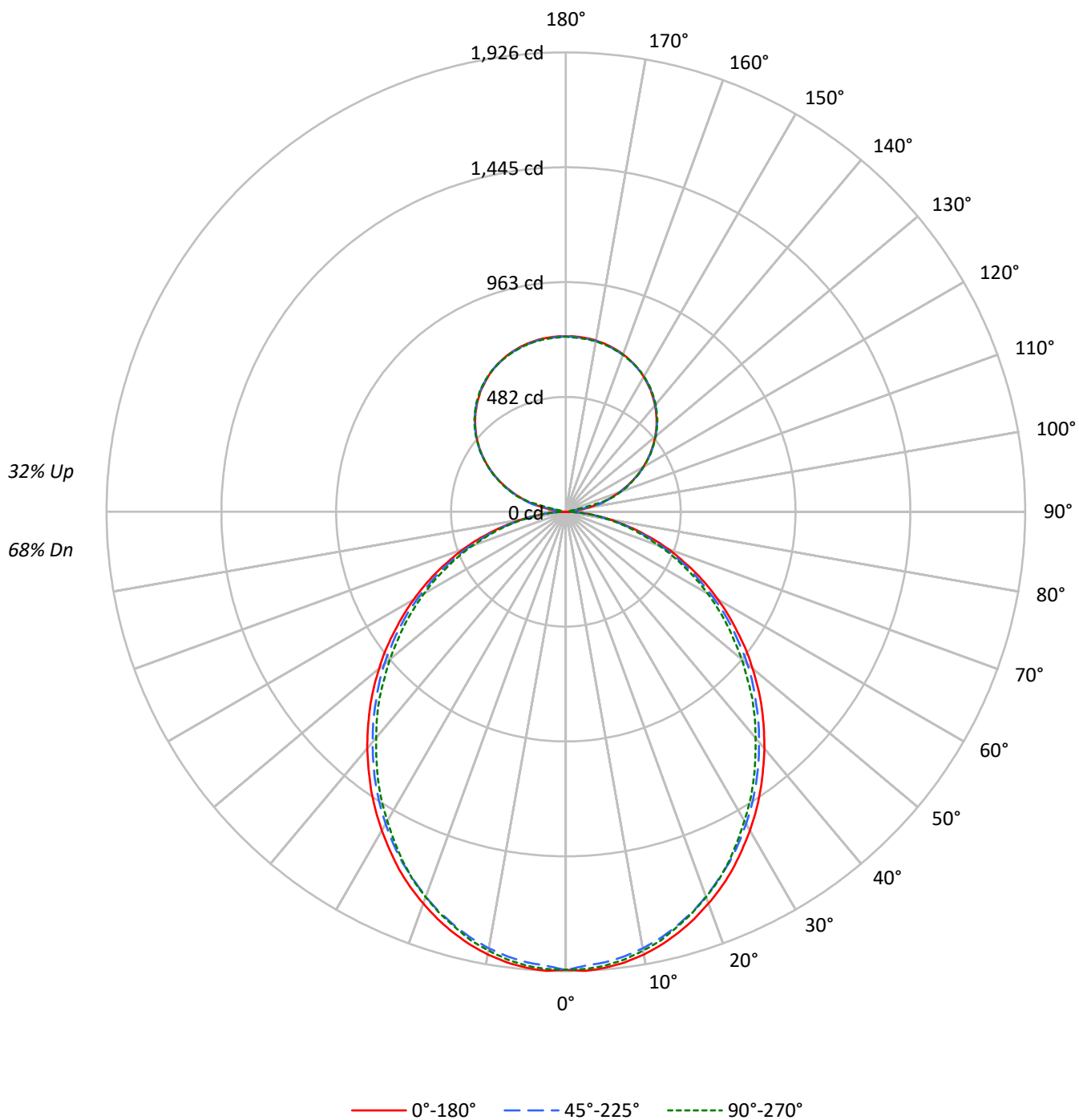
Lumens per Lamp: N/A
Luminaire Lumens: 7204.0 lumens
Efficiency: N/A
Efficacy: 93.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	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°	15660	15660	15660
5°	15672	15209	15228
10°	15540	14787	14684
15°	15317	14285	14069
20°	15032	13742	13434
25°	14712	13168	12749
30°	14326	12548	11998
35°	13926	11912	11272
40°	13508	11229	10500
45°	13071	10544	9778
50°	12586	9879	8978
55°	12060	9104	8184
60°	11522	8254	7356
65°	10906	7376	6424
70°	10196	6318	5425
75°	9135	5093	4345
80°	7786	3683	3057
85°	6047	2050	1645

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13071 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.0	2.5
10°-20°	509.9	7.1
20°-30°	750.5	10.4
30°-40°	872.4	12.1
40°-50°	872.3	12.1
50°-60°	763.0	10.6
60°-70°	566.4	7.9
70°-80°	321.4	4.5
80°-90°	93.6	1.3
90°-100°	24.4	0.3
100°-110°	160.6	2.2
110°-120°	306.7	4.3
120°-130°	389.4	5.4
130°-140°	416.5	5.8
140°-150°	389.5	5.4
150°-160°	314.1	4.4
160°-170°	202.6	2.8
170°-180°	69.8	1.0
0°-30°	1441.4	20.0
0°-40°	2313.8	32.1
0°-60°	3949.1	54.8
0°-90°	4930.5	68.4
90°-120°	491.7	6.8
90°-150°	1687.0	23.4
90°-180°	2273.0	31.6
0°-180°	7204.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1919	1913	1896	1913	1910	182
15°	1826	1820	1797	1806	1802	515
25°	1654	1643	1622	1623	1617	761
35°	1423	1413	1391	1380	1373	890
45°	1162	1151	1126	1109	1105	896
55°	879	874	852	834	825	787
65°	596	588	572	557	549	589
75°	317	309	302	295	294	336
85°	83	83	80	80	78	89
90°	2	8	12	15	16	7
95°	30	12	12	15	16	37
105°	165	169	172	176	157	173
115°	309	310	310	311	311	304
125°	434	436	435	437	437	388
135°	538	538	540	541	542	415
145°	621	623	623	623	624	388
155°	681	681	680	682	680	314
165°	718	716	716	720	715	203
175°	735	731	732	737	730	70
180°	735	735	735	735	735	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1920.4	1920.4	1920.4	1920.4	1920.4
2.5°	1926.5	1921.9	1905.0	1920.4	1918.8
5°	1918.8	1912.7	1895.7	1912.7	1909.6
7.5°	1905.0	1898.8	1880.4	1894.2	1892.7
10°	1885.0	1878.8	1858.8	1871.1	1868.1
12.5°	1858.8	1852.7	1831.1	1845.0	1840.4
15°	1826.5	1820.3	1797.3	1806.5	1801.9
17.5°	1789.6	1781.9	1760.3	1766.5	1763.4
20°	1748.0	1740.3	1717.3	1721.9	1718.8
22.5°	1703.4	1692.6	1669.6	1678.8	1672.6
25°	1654.2	1643.4	1621.8	1623.4	1617.2
27.5°	1598.8	1588.0	1568.0	1564.9	1557.2
30°	1543.4	1531.1	1511.1	1504.9	1497.2
32.5°	1484.9	1474.1	1452.6	1444.9	1437.2
35°	1423.4	1412.6	1391.0	1380.3	1372.6
37.5°	1358.7	1349.5	1326.4	1315.6	1304.9
40°	1295.6	1283.3	1260.2	1244.9	1237.2
42.5°	1227.9	1221.8	1195.6	1177.1	1172.5
45°	1161.8	1151.0	1126.4	1109.4	1104.8
47.5°	1092.5	1084.8	1061.7	1043.3	1031.0
50°	1021.7	1015.6	994.0	972.5	963.3
52.5°	952.5	944.8	921.7	903.3	890.9
55°	878.6	874.0	852.5	834.0	824.8
57.5°	809.4	804.8	783.2	764.8	755.5
60°	737.1	729.4	709.4	695.5	687.8
62.5°	666.3	660.1	638.6	626.3	618.6
65°	595.5	587.8	572.4	557.0	549.3
67.5°	523.2	517.0	501.6	486.2	484.7
70°	457.0	446.2	433.9	421.6	417.0
72.5°	386.2	375.5	366.2	357.0	352.4
75°	317.0	309.3	301.6	295.4	293.9
77.5°	249.3	246.2	238.5	237.0	232.4
80°	189.3	184.7	181.6	178.5	177.0
82.5°	130.8	129.3	129.3	127.7	126.2
85°	83.1	83.1	80.0	80.0	78.5
87.5°	40.0	38.5	36.9	36.9	36.9
90°	1.6	7.7	12.1	15.4	16.5
92.5°	8.2	7.1	11.5	14.8	14.8
95°	30.2	11.5	12.1	15.4	15.9
97.5°	57.7	69.8	12.1	14.8	15.4
100°	90.1	100.0	24.2	14.8	15.4
102.5°	126.4	133.0	139.6	15.9	15.9
105°	165.4	168.7	171.5	176.4	156.6
107.5°	201.1	202.8	206.6	209.4	211.6
110°	237.4	239.0	242.3	243.4	245.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	272.6	275.9	277.0	276.4	278.6
115°	308.8	310.5	309.9	311.0	311.0
117.5°	341.3	343.5	345.1	344.6	344.6
120°	374.2	376.4	375.9	377.0	375.9
122.5°	405.0	406.1	407.2	407.8	406.7
125°	434.1	436.3	435.2	436.9	437.4
127.5°	462.2	462.7	465.5	464.9	464.4
130°	489.1	489.6	491.3	491.8	491.8
132.5°	513.8	514.9	517.1	517.7	517.1
135°	538.5	538.0	540.2	541.3	542.4
137.5°	560.5	560.5	563.3	564.4	563.8
140°	582.0	583.1	584.1	585.8	586.3
142.5°	601.2	603.4	603.9	605.0	605.0
145°	621.0	622.6	622.6	623.2	624.3
147.5°	636.4	639.7	639.1	639.7	640.2
150°	653.4	655.6	655.0	655.0	655.6
152.5°	667.7	669.3	668.2	669.3	668.8
155°	680.9	681.4	679.8	682.0	680.3
157.5°	692.4	692.4	690.2	693.0	690.2
160°	702.3	700.6	700.1	703.4	700.1
162.5°	711.1	708.9	708.3	711.6	707.8
165°	718.2	715.5	715.5	719.9	714.9
167.5°	724.3	721.5	721.0	725.9	720.4
170°	729.2	725.9	726.5	730.9	725.4
172.5°	732.5	729.2	729.8	734.2	728.1
175°	734.7	731.4	732.0	736.9	730.3
177.5°	736.4	732.5	733.6	738.0	731.4
180°	734.7	734.7	734.7	734.7	734.7

(END OF REPORT)