

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: P1001031

Luminaire Tested: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001031
REPORT IS A COMBINATION OF REPORTS P995647 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

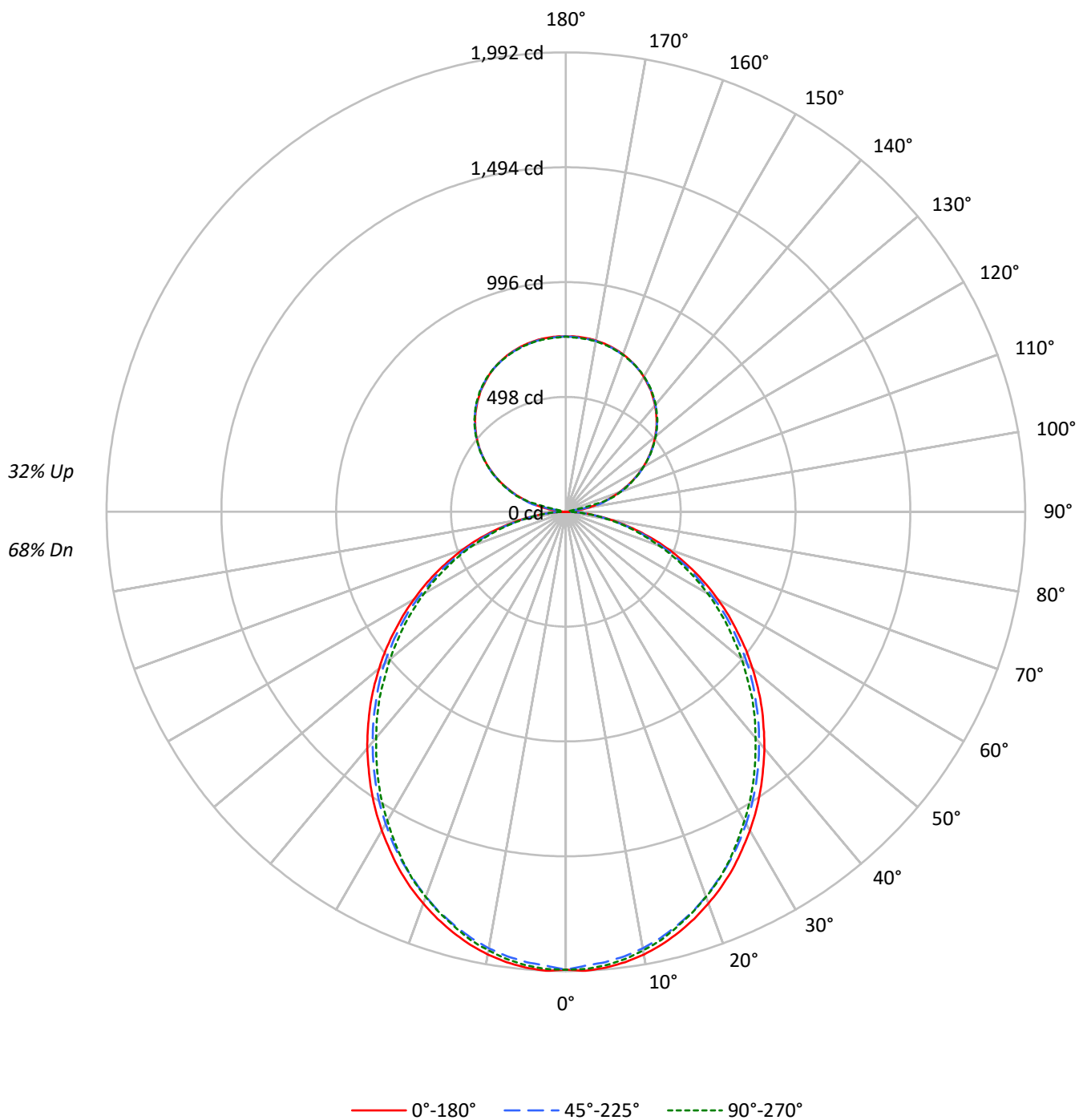
Lumens per Lamp: N/A
Luminaire Lumens: 7450.0 lumens
Efficiency: N/A
Efficacy: 97.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	16193	16193	16193
5°	16206	15728	15747
10°	16069	15291	15184
15°	15839	14772	14549
20°	15545	14210	13892
25°	15213	13617	13184
30°	14814	12976	12407
35°	14400	12318	11656
40°	13969	11612	10857
45°	13517	10904	10111
50°	13016	10216	9284
55°	12472	9414	8463
60°	11915	8534	7608
65°	11277	7627	6644
70°	10544	6534	5610
75°	9446	5267	4493
80°	8049	3809	3161
85°	6251	2119	1702

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13517 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.2	2.5
10°-20°	527.3	7.1
20°-30°	776.1	10.4
30°-40°	902.1	12.1
40°-50°	902.1	12.1
50°-60°	789.0	10.6
60°-70°	585.7	7.9
70°-80°	332.3	4.5
80°-90°	96.8	1.3
90°-100°	25.2	0.3
100°-110°	166.1	2.2
110°-120°	317.2	4.3
120°-130°	402.7	5.4
130°-140°	430.8	5.8
140°-150°	402.8	5.4
150°-160°	324.8	4.4
160°-170°	209.5	2.8
170°-180°	72.2	1.0
0°-30°	1490.6	20.0
0°-40°	2392.7	32.1
0°-60°	4083.7	54.8
0°-90°	5098.6	68.4
90°-120°	508.5	6.8
90°-150°	1744.9	23.4
90°-180°	2351.0	31.6
0°-180°	7450.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1986	1986	1986	1986	1986	
5°	1984	1978	1960	1978	1975	188
15°	1889	1882	1858	1868	1863	532
25°	1710	1699	1677	1679	1672	787
35°	1472	1461	1438	1427	1419	920
45°	1201	1190	1165	1147	1142	926
55°	909	904	882	862	853	814
65°	616	608	592	576	568	609
75°	328	320	312	306	304	348
85°	86	86	83	83	81	92
90°	2	8	12	16	17	7
95°	31	12	12	16	16	39
105°	171	174	177	182	162	179
115°	319	321	321	322	322	314
125°	449	451	450	452	452	401
135°	557	556	559	560	561	429
145°	642	644	644	644	646	401
155°	704	705	703	705	704	325
165°	743	740	740	745	739	210
175°	760	756	757	762	755	72
180°	760	760	760	760	760	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1985.8	1985.8	1985.8	1985.8	1985.8
2.5°	1992.2	1987.4	1969.9	1985.8	1984.2
5°	1984.2	1977.9	1960.4	1977.9	1974.7
7.5°	1969.9	1963.5	1944.5	1958.8	1957.2
10°	1949.2	1942.9	1922.2	1934.9	1931.7
12.5°	1922.2	1915.8	1893.5	1907.9	1903.1
15°	1888.8	1882.4	1858.5	1868.1	1863.3
17.5°	1850.6	1842.6	1820.3	1826.7	1823.5
20°	1807.6	1799.7	1775.8	1780.6	1777.4
22.5°	1761.5	1750.3	1726.5	1736.0	1729.6
25°	1710.5	1699.4	1677.1	1678.7	1672.4
27.5°	1653.3	1642.1	1621.4	1618.3	1610.3
30°	1596.0	1583.2	1562.6	1556.2	1548.2
32.5°	1535.5	1524.4	1502.1	1494.1	1486.2
35°	1471.9	1460.7	1438.4	1427.3	1419.4
37.5°	1405.0	1395.5	1371.6	1360.5	1349.3
40°	1339.8	1327.1	1303.2	1287.3	1279.3
42.5°	1269.8	1263.4	1236.4	1217.3	1212.5
45°	1201.4	1190.2	1164.8	1147.3	1142.5
47.5°	1129.8	1121.8	1097.9	1078.8	1066.1
50°	1056.6	1050.2	1027.9	1005.6	996.1
52.5°	985.0	977.0	953.1	934.0	921.3
55°	908.6	903.8	881.5	862.4	852.9
57.5°	837.0	832.2	809.9	790.8	781.3
60°	762.2	754.2	733.5	719.2	711.3
62.5°	689.0	682.6	660.3	647.6	639.7
65°	615.8	607.8	591.9	576.0	568.1
67.5°	541.0	534.6	518.7	502.8	501.2
70°	472.6	461.4	448.7	436.0	431.2
72.5°	399.4	388.3	378.7	369.2	364.4
75°	327.8	319.8	311.9	305.5	303.9
77.5°	257.8	254.6	246.6	245.0	240.3
80°	195.7	190.9	187.8	184.6	183.0
82.5°	135.3	133.7	133.7	132.1	130.5
85°	85.9	85.9	82.7	82.7	81.2
87.5°	41.4	39.8	38.2	38.2	38.2
90°	1.7	8.0	12.5	15.9	17.1
92.5°	8.5	7.4	11.9	15.3	15.3
95°	31.3	11.9	12.5	15.9	16.5
97.5°	59.7	72.2	12.5	15.3	15.9
100°	93.2	103.4	25.0	15.3	15.9
102.5°	130.7	137.5	144.4	16.5	16.5
105°	171.1	174.5	177.3	182.4	162.0
107.5°	208.0	209.7	213.7	216.5	218.8
110°	245.5	247.2	250.7	251.8	253.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	281.9	285.3	286.5	285.9	288.2
115°	319.4	321.1	320.6	321.7	321.7
117.5°	353.0	355.2	356.9	356.4	356.4
120°	387.1	389.3	388.8	389.9	388.8
122.5°	418.9	420.0	421.2	421.7	420.6
125°	449.0	451.3	450.1	451.9	452.4
127.5°	478.0	478.6	481.4	480.8	480.3
130°	505.8	506.4	508.1	508.7	508.7
132.5°	531.4	532.6	534.8	535.4	534.8
135°	557.0	556.4	558.7	559.8	561.0
137.5°	579.7	579.7	582.6	583.7	583.1
140°	601.9	603.0	604.2	605.9	606.5
142.5°	621.8	624.1	624.6	625.8	625.8
145°	642.3	644.0	644.0	644.5	645.7
147.5°	658.2	661.6	661.0	661.6	662.2
150°	675.8	678.1	677.5	677.5	678.1
152.5°	690.6	692.3	691.1	692.3	691.7
155°	704.2	704.8	703.1	705.3	703.6
157.5°	716.1	716.1	713.9	716.7	713.9
160°	726.4	724.7	724.1	727.5	724.1
162.5°	735.5	733.2	732.6	736.0	732.1
165°	742.9	740.0	740.0	744.6	739.4
167.5°	749.1	746.3	745.7	750.8	745.1
170°	754.2	750.8	751.4	755.9	750.2
172.5°	757.6	754.2	754.8	759.3	753.1
175°	759.9	756.5	757.1	762.2	755.4
177.5°	761.6	757.6	758.8	763.3	756.5
180°	759.9	759.9	759.9	759.9	759.9

(END OF REPORT)