

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: P1001033

Luminaire Tested: SA4XXDIP-B1195D590UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001033
REPORT IS A COMBINATION OF REPORTS P995649 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-F4
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

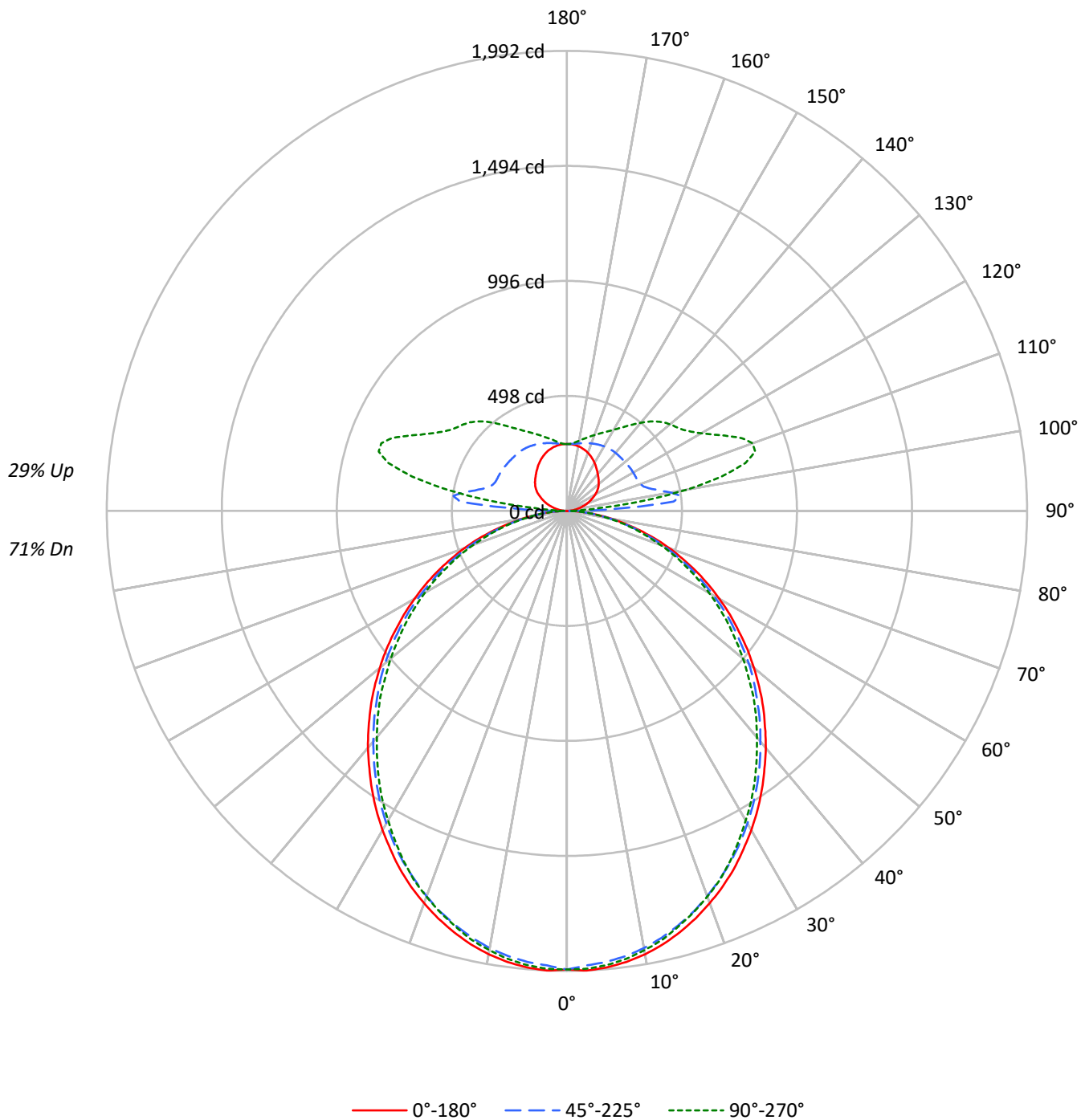
Lumens per Lamp: N/A
Luminaire Lumens: 7209.2 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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°	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	2.6
10°-20°	527.3	7.3
20°-30°	776.1	10.8
30°-40°	902.1	12.5
40°-50°	902.1	12.5
50°-60°	789.0	10.9
60°-70°	585.7	8.1
70°-80°	332.3	4.6
80°-90°	96.3	1.3
90°-100°	214.9	3.0
100°-110°	437.0	6.1
110°-120°	389.5	5.4
120°-130°	327.2	4.5
130°-140°	273.1	3.8
140°-150°	208.5	2.9
150°-160°	146.6	2.0
160°-170°	86.2	1.2
170°-180°	28.0	0.4
0°-30°	1490.6	20.7
0°-40°	2392.7	33.2
0°-60°	4083.7	56.6
0°-90°	5098.1	70.7
90°-120°	1041.5	14.4
90°-150°	1850.3	25.7
90°-180°	2111.0	29.3
0°-180°	7209.2	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°	1	4	10	11	12	7
95°	19	59	463	229	139	21
105°	66	96	373	803	800	71
115°	117	147	332	639	768	116
125°	163	194	331	544	613	145
135°	194	231	328	482	548	150
145°	223	256	326	407	447	140
155°	254	274	317	359	374	117
165°	277	285	304	322	327	78
175°	289	289	292	296	294	27
180°	289	289	289	289	289	

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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°	0.6	4.5	10.2	11.4	11.9
92.5°	8.0	43.8	222.8	73.6	51.7
95°	18.8	59.1	463.2	229.4	138.7
97.5°	31.3	65.4	495.6	468.3	333.0
100°	43.2	73.9	456.9	647.9	521.1
102.5°	54.6	84.1	408.6	760.4	684.8
105°	66.5	96.4	372.8	802.8	799.6
107.5°	79.6	108.8	349.5	790.0	854.2
110°	92.6	121.4	338.7	744.5	855.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	105.1	133.8	333.6	688.8	821.8
115°	117.1	146.9	332.5	638.8	767.8
117.5°	129.6	159.1	331.9	599.6	714.9
120°	142.1	171.0	331.9	573.2	671.8
122.5°	153.4	182.7	331.3	555.8	637.7
125°	163.1	193.8	330.8	543.6	612.6
127.5°	172.2	204.0	329.6	532.0	596.7
130°	179.6	214.0	329.1	518.0	583.1
132.5°	187.0	222.5	328.5	501.6	567.8
135°	193.8	230.7	327.9	482.5	547.9
137.5°	200.6	237.8	327.9	462.0	524.6
140°	208.0	244.4	327.4	442.2	499.0
142.5°	216.0	250.4	327.4	423.6	471.7
145°	223.3	255.8	326.2	407.0	447.3
147.5°	231.9	260.8	324.5	393.0	424.5
150°	239.8	265.7	322.8	380.2	405.8
152.5°	247.2	270.2	320.0	369.4	388.7
155°	254.0	274.2	317.1	359.2	374.5
157.5°	260.9	277.9	314.3	349.5	361.5
160°	267.1	281.0	310.9	339.8	349.5
162.5°	272.8	283.6	307.5	330.5	338.2
165°	276.8	285.3	304.1	322.0	326.8
167.5°	281.3	286.7	300.6	314.5	317.7
170°	284.2	287.8	297.2	307.2	309.2
172.5°	287.0	288.7	293.8	300.6	300.6
175°	288.7	289.3	291.5	295.5	294.4
177.5°	289.8	289.3	289.8	291.8	289.8
180°	289.3	289.3	289.3	289.3	289.3

(END OF REPORT)