

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: P1000987

Luminaire Tested: SA4XXDIP-B1195D590UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000987
REPORT IS A COMBINATION OF REPORTS P995603 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB27-4F0-XX-W2A-D1
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

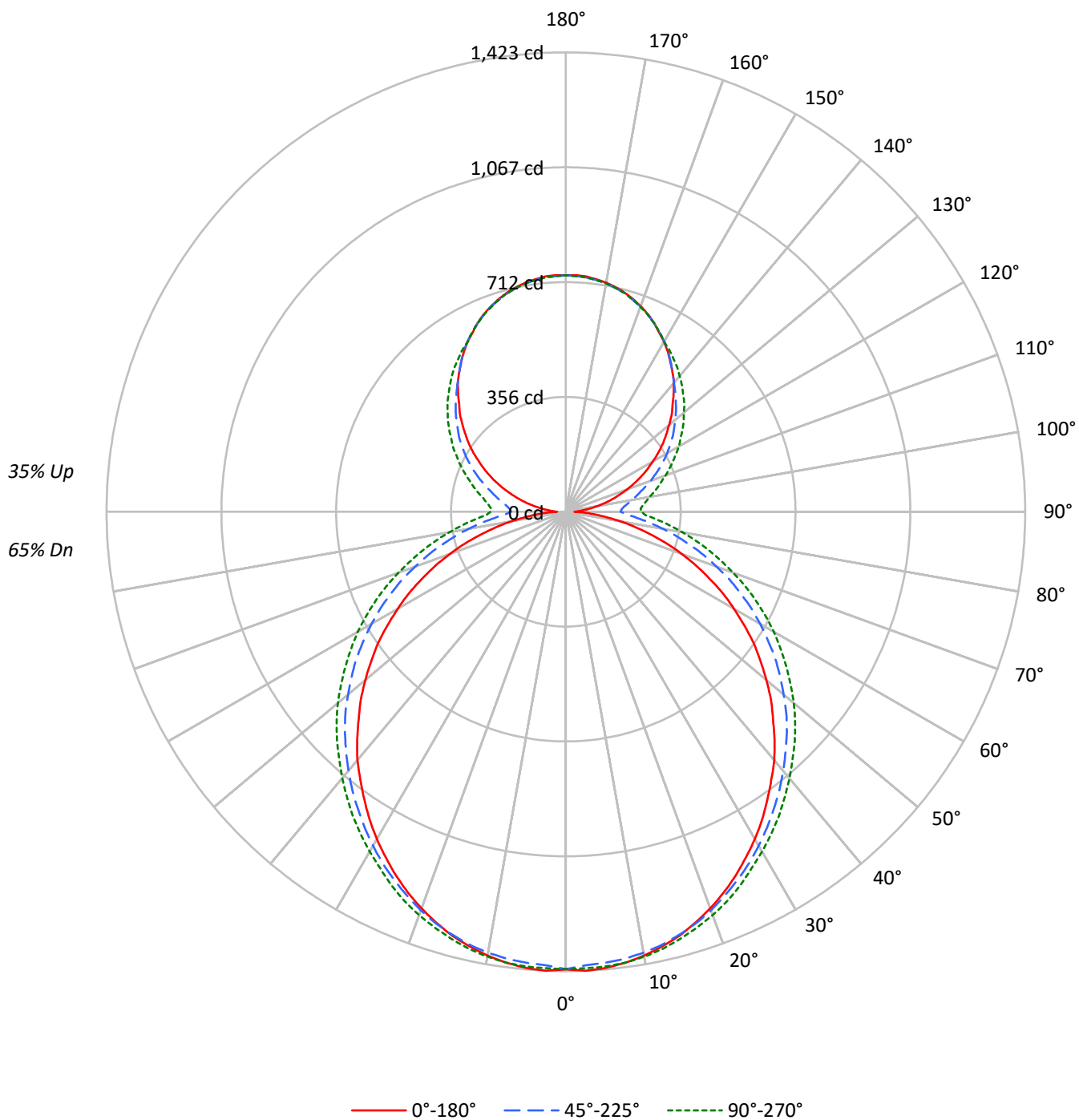
Lumens per Lamp: N/A
Luminaire Lumens: 6865.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	111	111	111	111	104	104	104	104	92	92	92	80	80	80	70	70	70
1	100	95	90	86	94	89	85	82	79	76	73	69	67	64	60	58	57
2	90	82	75	69	85	77	71	66	68	63	59	60	56	53	52	49	47
3	82	72	64	57	77	68	60	54	60	54	49	52	48	44	45	42	39
4	75	63	55	48	70	60	52	46	53	46	42	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	41	36	41	36	32	36	32	29
6	63	50	42	35	59	48	40	34	42	36	31	37	32	28	33	28	25
7	59	45	37	31	55	43	35	30	38	32	27	34	29	25	30	26	22
8	54	41	33	27	51	39	32	26	35	29	24	31	26	22	27	23	20
9	51	38	30	24	47	36	28	24	32	26	22	29	23	20	25	21	18
10	47	35	27	22	44	33	26	21	30	24	19	26	21	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11555	11555	11555
5°	11586	11254	11274
10°	11511	11032	11000
15°	11403	10783	10692
20°	11244	10513	10393
25°	11064	10216	10070
30°	10869	9922	9740
35°	10649	9621	9447
40°	10472	9331	9144
45°	10211	9060	8875
50°	9988	8752	8592
55°	9758	8456	8266
60°	9401	8086	7959
65°	9008	7688	7590
70°	8531	7233	7163
75°	7864	6726	6757
80°	7115	6210	6331
85°	6120	5691	5986

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10211 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.3	2.0
10°-20°	384.7	5.6
20°-30°	581.6	8.5
30°-40°	703.7	10.3
40°-50°	743.9	10.8
50°-60°	700.1	10.2
60°-70°	581.0	8.5
70°-80°	407.7	5.9
80°-90°	231.4	3.4
90°-100°	184.6	2.7
100°-110°	244.3	3.6
110°-120°	310.9	4.5
120°-130°	358.7	5.2
130°-140°	376.4	5.5
140°-150°	357.0	5.2
150°-160°	297.5	4.3
160°-170°	197.9	2.9
170°-180°	69.3	1.0
0°-30°	1100.6	16.0
0°-40°	1804.2	26.3
0°-60°	3248.2	47.3
0°-90°	4468.2	65.1
90°-120°	739.9	10.8
90°-150°	1832.0	26.7
90°-180°	2397.0	34.9
0°-180°	6865.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1417	1417	1417	1417	1417	
5°	1418	1414	1403	1415	1414	135
15°	1360	1361	1357	1371	1369	383
25°	1244	1254	1258	1276	1277	573
35°	1088	1108	1123	1146	1150	682
45°	908	938	968	995	1003	701
55°	711	744	792	824	833	633
65°	492	543	597	636	649	488
75°	273	332	398	443	457	290
85°	84	151	222	270	286	88
90°	27	97	170	219	233	20
95°	55	112	181	226	240	53
105°	146	179	240	281	295	156
115°	256	271	320	355	365	254
125°	366	364	404	433	441	327
135°	467	471	482	506	514	362
145°	565	566	566	575	580	354
155°	646	646	645	648	645	297
165°	703	701	700	704	701	198
175°	731	728	728	732	728	69
180°	732	732	732	732	732	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1417.0	1417.0	1417.0	1417.0	1417.0
2.5°	1423.3	1418.5	1405.9	1417.0	1415.4
5°	1418.5	1413.8	1402.7	1415.4	1413.8
7.5°	1409.0	1405.9	1396.3	1410.6	1409.0
10°	1396.3	1394.7	1386.8	1401.1	1399.5
12.5°	1378.9	1378.9	1374.1	1386.8	1386.8
15°	1359.8	1361.4	1356.7	1370.9	1369.4
17.5°	1334.5	1339.2	1337.6	1351.9	1350.3
20°	1307.5	1312.2	1313.8	1329.7	1329.7
22.5°	1277.3	1283.7	1286.8	1302.7	1305.9
25°	1244.0	1253.5	1258.3	1275.7	1277.3
27.5°	1207.5	1221.8	1228.1	1244.0	1245.6
30°	1171.0	1183.7	1194.8	1212.3	1215.4
32.5°	1131.3	1147.2	1159.9	1180.5	1183.7
35°	1088.5	1107.5	1123.4	1145.6	1150.4
37.5°	1045.7	1067.9	1086.9	1109.1	1113.9
40°	1004.4	1025.0	1047.2	1071.1	1077.4
42.5°	956.8	980.6	1007.6	1034.6	1039.3
45°	907.6	937.8	967.9	994.9	1002.8
47.5°	861.6	891.7	926.7	953.6	963.2
50°	810.8	845.7	880.6	912.4	921.9
52.5°	760.0	795.0	836.2	867.9	877.5
55°	710.9	744.2	791.8	823.5	833.0
57.5°	655.3	696.6	742.6	780.7	788.6
60°	601.4	642.6	695.0	731.5	744.2
62.5°	549.0	595.0	647.4	683.9	696.6
65°	491.9	542.7	596.6	636.3	649.0
67.5°	437.9	491.9	549.0	588.7	601.4
70°	382.4	436.4	496.7	539.5	550.6
72.5°	328.5	384.0	449.0	490.3	503.0
75°	272.9	331.6	398.3	442.7	457.0
77.5°	220.6	282.4	352.3	396.7	412.6
80°	173.0	236.4	306.2	353.8	366.5
82.5°	125.4	192.0	261.8	311.0	325.3
85°	84.1	150.7	222.1	269.7	285.6
87.5°	52.4	117.4	187.2	233.3	247.5
90°	27.1	96.8	169.6	219.0	232.8
92.5°	38.5	101.4	172.5	218.6	231.9
95°	54.6	112.1	181.1	225.7	240.0
97.5°	73.4	124.0	193.5	237.1	251.3
100°	96.8	140.3	207.3	251.2	262.3
102.5°	122.9	158.3	223.2	266.1	279.3
105°	146.3	178.6	239.5	280.9	295.3
107.5°	174.1	201.6	257.7	299.7	310.2
110°	200.8	224.1	279.0	314.4	328.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	228.6	247.6	298.9	333.8	346.5
115°	256.5	270.8	320.5	354.8	365.3
117.5°	284.3	293.8	340.8	372.5	383.5
120°	310.4	317.5	361.8	390.7	404.5
122.5°	339.3	339.9	382.2	412.2	420.5
125°	366.0	364.5	403.6	432.6	441.0
127.5°	391.5	391.7	422.3	449.8	460.3
130°	417.2	417.3	442.7	470.1	477.3
132.5°	445.0	444.5	462.9	488.8	497.8
135°	467.2	470.6	481.7	505.9	513.7
137.5°	493.8	493.9	501.3	523.4	532.0
140°	520.4	520.0	521.6	541.6	548.9
142.5°	543.2	544.3	542.2	559.7	566.0
145°	565.3	565.9	566.5	575.4	580.2
147.5°	587.9	589.2	588.6	589.6	595.4
150°	608.3	609.0	609.0	609.0	608.4
152.5°	626.0	627.1	627.7	629.4	627.7
155°	645.8	645.8	645.3	647.5	645.3
157.5°	662.8	661.7	661.7	663.4	661.7
160°	677.6	677.0	676.4	678.1	675.3
162.5°	691.2	689.5	688.9	692.3	689.5
165°	703.0	701.3	700.2	703.6	701.3
167.5°	712.7	710.4	710.4	713.8	710.4
170°	720.6	717.8	718.3	721.7	717.8
172.5°	726.3	724.0	724.0	728.0	724.0
175°	731.4	728.5	728.0	731.9	728.0
177.5°	733.6	730.8	730.8	734.8	730.2
180°	732.5	732.5	732.5	732.5	732.5

(END OF REPORT)