

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: P1000986

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000986
REPORT IS A COMBINATION OF REPORTS P995602 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-D
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

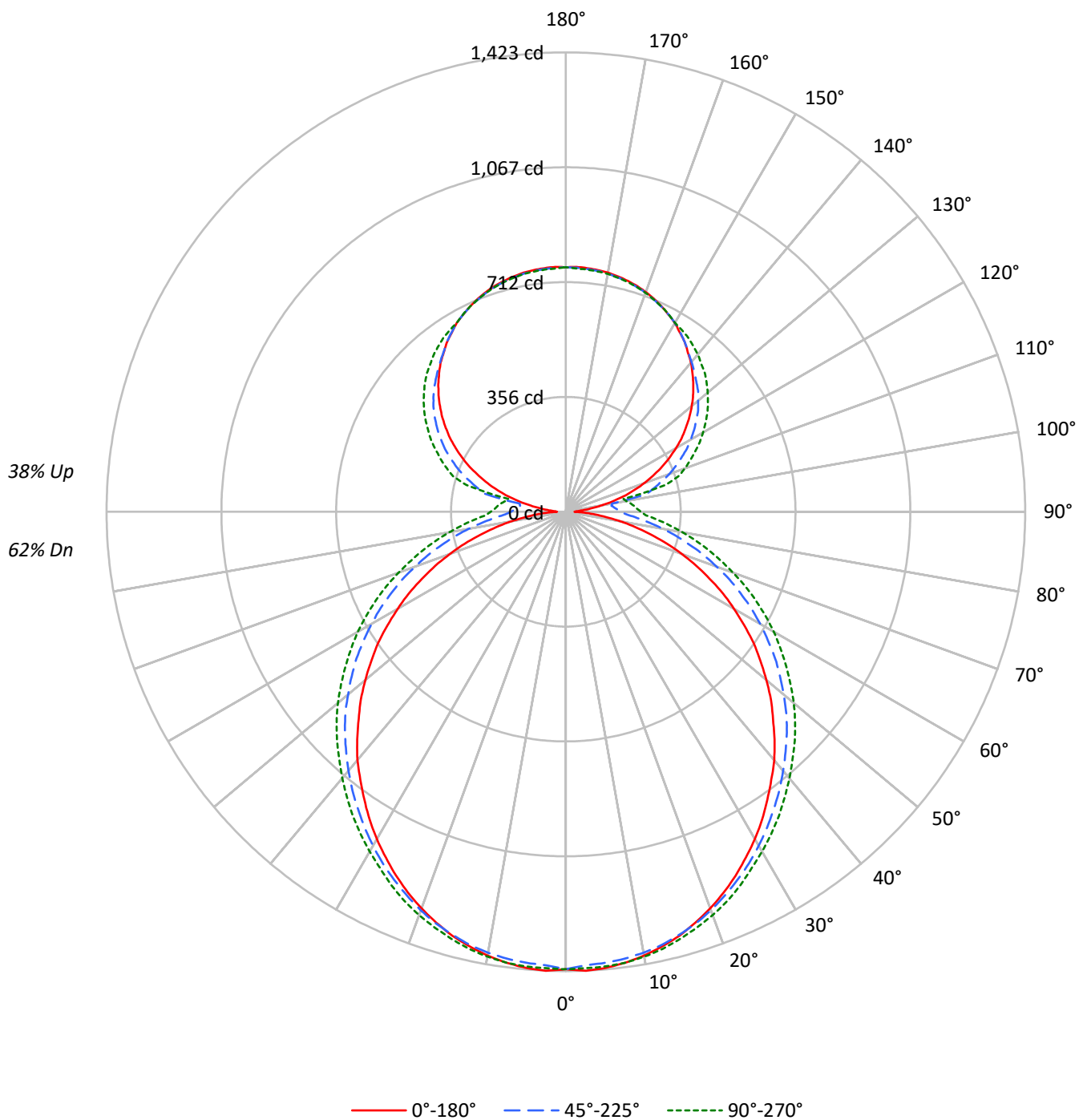
Lumens per Lamp: N/A
Luminaire Lumens: 7177.0 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67
1	99	94	90	86	93	88	84	81	77	74	72	67	65	63	58	56	54
2	90	82	75	69	84	77	71	65	67	62	58	58	55	51	50	47	45
3	82	71	63	57	76	67	60	54	59	53	48	51	47	43	44	40	38
4	75	63	54	48	69	59	51	46	52	46	41	45	40	36	39	35	32
5	68	56	47	41	64	53	45	39	46	40	35	40	35	31	35	31	28
6	63	50	41	35	59	47	39	34	42	35	30	36	31	27	32	27	24
7	58	45	37	31	54	43	35	29	38	31	27	33	28	24	29	25	21
8	54	41	33	27	50	39	31	26	34	28	24	30	25	21	26	22	19
9	50	37	30	24	47	35	28	23	31	25	21	28	23	19	24	20	17
10	47	34	27	22	44	33	26	21	29	23	19	26	21	17	23	18	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	1.9
10°-20°	384.7	5.4
20°-30°	581.6	8.1
30°-40°	703.7	9.8
40°-50°	743.9	10.4
50°-60°	700.1	9.8
60°-70°	581.0	8.1
70°-80°	407.7	5.7
80°-90°	231.4	3.2
90°-100°	162.0	2.3
100°-110°	266.9	3.7
110°-120°	384.3	5.4
120°-130°	439.8	6.1
130°-140°	446.1	6.2
140°-150°	404.9	5.6
150°-160°	323.9	4.5
160°-170°	208.9	2.9
170°-180°	72.0	1.0
0°-30°	1100.6	15.3
0°-40°	1804.2	25.1
0°-60°	3248.2	45.3
0°-90°	4468.2	62.3
90°-120°	813.2	11.3
90°-150°	2104.0	29.3
90°-180°	2709.0	37.7
0°-180°	7177.0	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	19
95°	52	85	150	197	212	55
105°	185	220	282	326	319	195
115°	328	344	394	430	441	324
125°	454	455	493	525	535	406
135°	558	558	571	598	608	431
145°	642	642	642	652	660	401
155°	702	703	701	703	702	324
165°	741	738	738	742	737	209
175°	758	754	755	760	753	72
180°	758	758	758	758	758	

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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°	32.3	86.7	159.5	207.3	220.0
95°	51.8	84.9	150.5	196.8	211.6
97.5°	78.5	137.1	142.6	186.7	201.5
100°	110.4	161.8	145.5	178.7	190.4
102.5°	147.8	189.5	256.6	170.3	183.0
105°	184.9	220.0	281.5	326.3	318.6
107.5°	221.7	250.4	309.9	352.4	365.8
110°	257.5	281.4	340.3	377.9	392.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	292.2	314.6	368.1	402.4	417.4
115°	328.0	344.0	394.2	430.2	441.3
117.5°	361.4	373.2	422.5	455.3	468.0
120°	393.8	400.9	446.3	479.1	490.7
122.5°	425.5	426.7	470.7	503.0	512.9
125°	454.0	454.7	493.2	525.1	535.2
127.5°	482.9	481.9	516.5	544.5	555.0
130°	509.1	508.1	535.2	564.3	573.8
132.5°	534.6	534.2	555.4	583.0	591.9
135°	558.5	558.0	571.3	597.9	608.5
137.5°	581.2	579.6	588.7	613.7	621.1
140°	603.3	602.8	605.6	627.9	636.3
142.5°	621.5	623.8	622.8	641.4	647.7
145°	641.9	642.0	642.0	652.1	659.6
147.5°	657.8	659.6	659.0	661.2	668.1
150°	675.4	676.0	675.5	675.5	676.0
152.5°	688.5	690.2	689.1	690.2	689.6
155°	702.1	702.7	701.0	703.2	701.5
157.5°	714.0	714.0	711.7	714.6	711.7
160°	724.2	722.5	721.9	725.3	721.9
162.5°	733.3	731.0	730.4	733.8	729.9
165°	740.6	737.8	737.8	742.3	737.2
167.5°	746.9	744.0	743.5	748.6	742.9
170°	752.0	748.6	749.1	753.7	748.0
172.5°	755.4	752.0	752.5	757.1	750.8
175°	757.6	754.2	754.8	759.9	753.1
177.5°	759.3	755.4	756.5	761.0	754.2
180°	757.6	757.6	757.6	757.6	757.6

(END OF REPORT)