

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: P1001012

Luminaire Tested: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1001012
REPORT IS A COMBINATION OF REPORTS P995628 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1195D590UB30-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

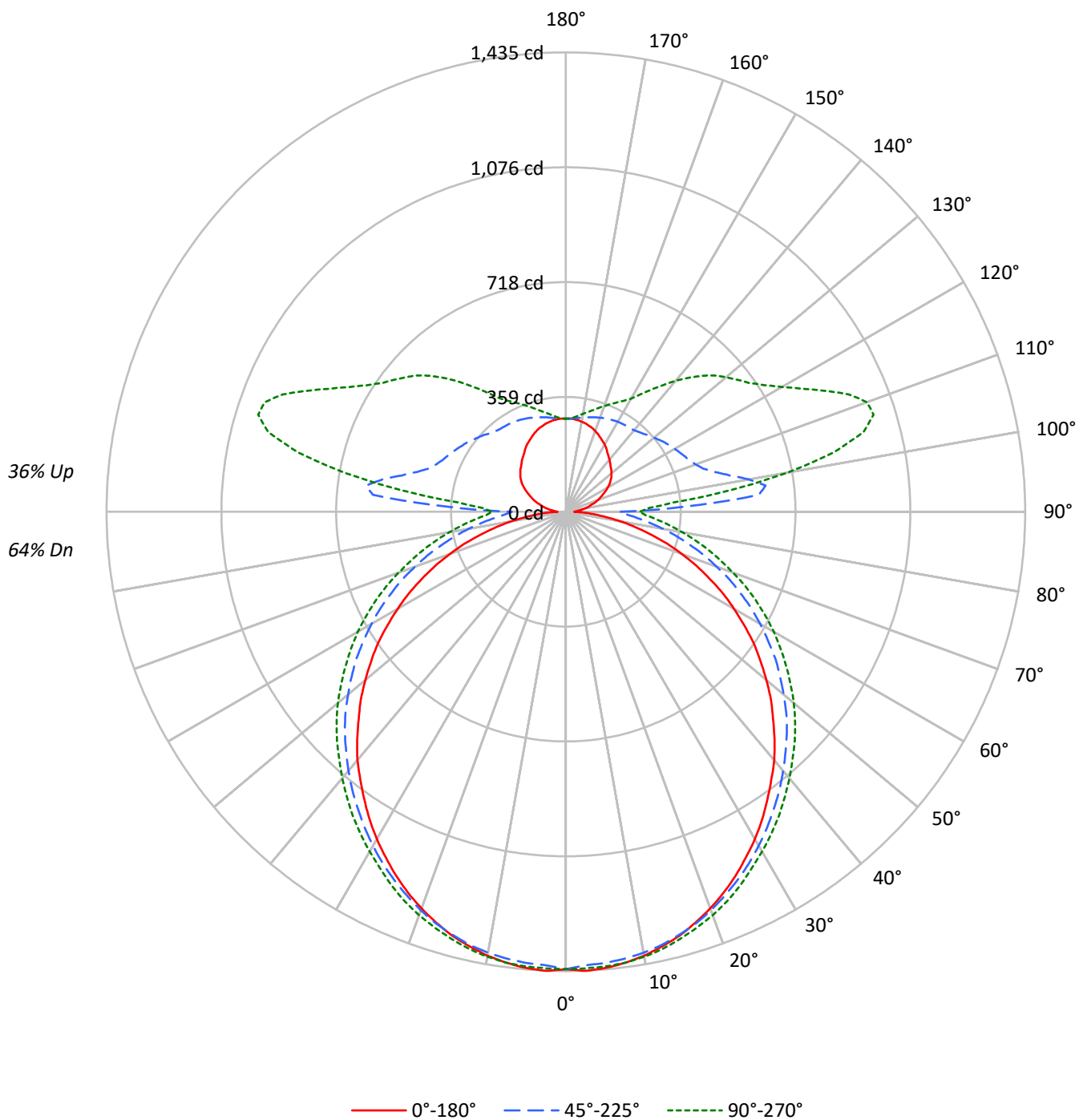
Lumens per Lamp: N/A
Luminaire Lumens: 6996.2 lumens
Efficiency: N/A
Efficacy: 91.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	91	91	91	80	80	80	69	69	69
1	100	95	90	86	93	89	85	81	78	75	72	68	66	64	59	58	56
2	90	82	75	69	84	77	71	66	68	63	59	59	56	52	51	49	46
3	82	72	64	57	77	67	60	54	59	54	49	52	47	44	45	42	39
4	75	63	55	48	70	59	52	46	53	46	41	46	41	37	40	36	33
5	69	56	47	41	64	53	45	39	47	40	36	41	36	32	36	32	28
6	63	50	42	35	59	47	40	34	42	36	31	37	32	28	32	28	25
7	58	45	37	31	55	43	35	30	38	32	27	34	28	25	30	25	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	23	32	26	22	28	23	20	25	21	18
10	47	35	27	22	44	33	26	21	29	23	19	26	21	18	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11653	11653	11653
5°	11685	11349	11370
10°	11609	11126	11094
15°	11501	10875	10783
20°	11339	10603	10481
25°	11158	10303	10156
30°	10962	10006	9823
35°	10739	9702	9528
40°	10561	9411	9221
45°	10298	9137	8950
50°	10073	8827	8665
55°	9841	8527	8336
60°	9481	8155	8027
65°	9085	7753	7654
70°	8605	7294	7225
75°	7931	6784	6815
80°	7173	6263	6384
85°	6171	5740	6037

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 10298 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.4	1.9
10°-20°	387.9	5.5
20°-30°	586.6	8.4
30°-40°	709.6	10.1
40°-50°	750.2	10.7
50°-60°	706.0	10.1
60°-70°	585.9	8.4
70°-80°	411.1	5.9
80°-90°	232.9	3.3
90°-100°	354.1	5.1
100°-110°	541.7	7.7
110°-120°	460.3	6.6
120°-130°	367.7	5.3
130°-140°	291.3	4.2
140°-150°	213.0	3.0
150°-160°	147.4	2.1
160°-170°	86.7	1.2
170°-180°	28.2	0.4
0°-30°	1109.9	15.9
0°-40°	1819.6	26.0
0°-60°	3275.8	46.8
0°-90°	4505.7	64.4
90°-120°	1356.1	19.4
90°-150°	2228.1	31.8
90°-180°	2490.0	35.6
0°-180°	6996.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1431	1426	1415	1427	1426	136
15°	1371	1373	1368	1383	1381	386
25°	1255	1264	1269	1287	1288	578
35°	1098	1117	1133	1155	1160	687
45°	915	946	976	1003	1011	707
55°	717	750	798	830	840	639
65°	496	547	602	642	654	492
75°	275	334	402	446	461	292
85°	85	152	224	272	288	88
90°	26	94	169	216	230	19
95°	40	133	605	413	336	37
105°	81	143	480	953	963	88
115°	127	172	410	753	894	127
125°	170	200	377	622	701	152
135°	198	235	344	525	601	154
145°	226	257	328	419	466	142
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.0	1429.0	1429.0	1429.0	1429.0
2.5°	1435.4	1430.6	1417.8	1429.0	1427.4
5°	1430.6	1425.8	1414.6	1427.4	1425.8
7.5°	1421.0	1417.8	1408.2	1422.6	1421.0
10°	1408.2	1406.6	1398.6	1413.0	1411.4
12.5°	1390.6	1390.6	1385.8	1398.6	1398.6
15°	1371.4	1373.0	1368.2	1382.6	1381.0
17.5°	1345.8	1350.6	1349.0	1363.4	1361.8
20°	1318.6	1323.4	1325.0	1341.0	1341.0
22.5°	1288.2	1294.6	1297.8	1313.8	1317.0
25°	1254.6	1264.2	1269.0	1286.6	1288.2
27.5°	1217.8	1232.2	1238.6	1254.6	1256.2
30°	1181.0	1193.8	1205.0	1222.6	1225.8
32.5°	1140.9	1157.0	1169.8	1190.6	1193.8
35°	1097.7	1116.9	1132.9	1155.4	1160.2
37.5°	1054.5	1076.9	1096.1	1118.5	1123.3
40°	1012.9	1033.7	1056.1	1080.1	1086.5
42.5°	964.9	988.9	1016.1	1043.3	1048.1
45°	915.3	945.7	976.1	1003.3	1011.3
47.5°	868.9	899.3	934.5	961.7	971.3
50°	817.7	852.9	888.1	920.1	929.7
52.5°	766.5	801.7	843.3	875.3	884.9
55°	716.9	750.5	798.5	830.5	840.1
57.5°	660.9	702.5	748.9	787.3	795.3
60°	606.5	648.1	700.9	737.7	750.5
62.5°	553.7	600.1	652.9	689.7	702.5
65°	496.1	547.3	601.7	641.7	654.5
67.5°	441.7	496.1	553.7	593.7	606.5
70°	385.7	440.1	500.9	544.1	555.3
72.5°	331.2	387.3	452.9	494.5	507.3
75°	275.2	334.4	401.7	446.5	460.9
77.5°	222.4	284.8	355.2	400.1	416.1
80°	174.4	238.4	308.8	356.8	369.6
82.5°	126.4	193.6	264.0	313.6	328.0
85°	84.8	152.0	224.0	272.0	288.0
87.5°	52.8	118.4	188.8	235.2	249.6
90°	26.2	94.2	168.7	216.2	229.6
92.5°	32.0	124.0	372.8	267.6	258.4
95°	39.7	133.0	605.0	413.0	336.3
97.5°	50.6	131.3	629.6	643.8	522.1
100°	61.0	133.5	581.1	816.3	700.1
102.5°	72.5	137.4	524.5	920.0	856.7
105°	81.3	143.3	480.5	952.9	962.6
107.5°	94.4	151.0	449.1	932.1	1007.8
110°	106.0	157.2	431.8	876.8	1001.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	116.9	165.0	418.7	811.2	957.7
115°	127.3	171.8	409.6	752.8	893.8
117.5°	139.9	179.2	401.0	703.8	832.6
120°	150.9	184.8	393.0	667.6	779.6
122.5°	162.3	191.8	384.4	642.2	735.7
125°	170.4	199.7	377.4	621.9	700.9
127.5°	179.6	210.0	368.3	600.6	676.9
130°	185.4	218.4	359.7	578.6	653.6
132.5°	192.8	227.0	352.8	554.0	630.2
135°	198.1	235.2	344.2	525.2	600.6
137.5°	205.0	240.8	337.8	496.6	567.5
140°	212.4	247.4	332.4	468.7	533.8
142.5°	218.8	253.4	329.2	443.7	498.4
145°	226.2	257.2	328.1	418.8	465.8
147.5°	234.8	262.4	326.4	396.8	435.0
150°	242.8	267.2	324.6	382.4	408.1
152.5°	248.6	271.8	321.8	371.5	390.9
155°	255.5	275.8	318.9	361.2	376.7
157.5°	262.3	279.5	316.1	351.5	363.5
160°	268.6	282.6	312.6	341.8	351.5
162.5°	274.3	285.2	309.2	332.4	340.1
165°	278.3	286.9	305.8	323.8	328.6
167.5°	282.9	288.4	302.4	316.4	319.5
170°	285.8	289.5	298.9	309.0	310.9
172.5°	288.6	290.4	295.5	302.4	302.4
175°	290.4	290.9	293.2	297.2	296.1
177.5°	291.5	290.9	291.5	293.5	291.5
180°	290.9	290.9	290.9	290.9	290.9

(END OF REPORT)