

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: P1000691

Luminaire Tested: SA4XXDIP-B1020D590UB27-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000691
REPORT IS A COMBINATION OF REPORTS P995304 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D590UB27-4F0-XX-W2A-D4
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

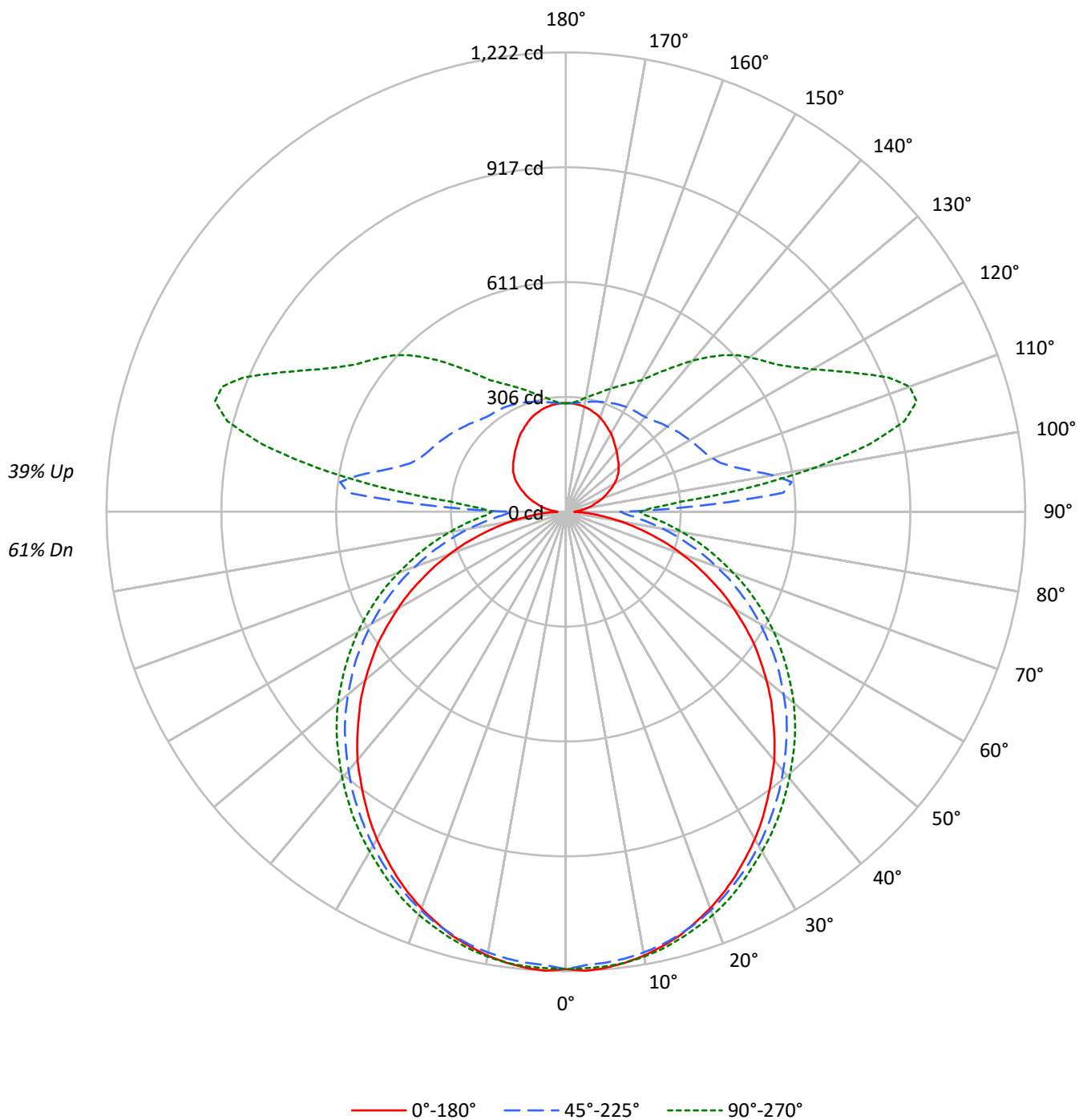
Lumens per Lamp: N/A
Luminaire Lumens: 6254.2 lumens
Efficiency: N/A
Efficacy: 100.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 62.2
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	92	88	84	81	77	74	71	66	64	62	57	55	54
2	90	82	75	69	84	76	70	65	67	62	58	58	54	51	49	47	44
3	82	71	63	57	76	67	60	54	58	53	48	51	46	43	43	40	37
4	74	63	54	48	69	59	51	45	52	45	41	45	40	36	38	35	32
5	68	56	47	41	63	52	45	39	46	40	35	40	35	31	34	30	27
6	63	50	41	35	58	47	39	34	41	35	30	36	31	27	31	27	24
7	58	45	37	31	54	42	35	29	37	31	27	33	28	24	28	24	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	32	25	21	29	23	19	25	21	17	22	18	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9921	9921	9921
5°	9948	9663	9680
10°	9884	9472	9445
15°	9791	9259	9181
20°	9654	9027	8923
25°	9499	8772	8646
30°	9333	8519	8363
35°	9144	8261	8111
40°	8992	8012	7851
45°	8768	7780	7620
50°	8577	7515	7378
55°	8379	7260	7098
60°	8072	6942	6834
65°	7734	6601	6517
70°	7324	6209	6151
75°	6752	5776	5802
80°	6108	5332	5436
85°	5254	4887	5140

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8768 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.8
10°-20°	330.3	5.3
20°-30°	499.4	8.0
30°-40°	604.2	9.7
40°-50°	638.7	10.2
50°-60°	601.1	9.6
60°-70°	498.8	8.0
70°-80°	350.0	5.6
80°-90°	198.4	3.2
90°-100°	331.8	5.3
100°-110°	522.8	8.4
110°-120°	446.8	7.1
120°-130°	359.2	5.7
130°-140°	286.5	4.6
140°-150°	210.8	3.4
150°-160°	146.2	2.3
160°-170°	86.0	1.4
170°-180°	28.0	0.4
0°-30°	945.0	15.1
0°-40°	1549.1	24.8
0°-60°	2789.0	44.6
0°-90°	3836.3	61.3
90°-120°	1301.4	20.8
90°-150°	2157.8	34.5
90°-180°	2418.0	38.7
0°-180°	6254.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1217	1217	1217	1217	1217	
5°	1218	1214	1204	1215	1214	116
15°	1168	1169	1165	1177	1176	329
25°	1068	1076	1080	1095	1097	492
35°	935	951	965	984	988	585
45°	779	805	831	854	861	602
55°	610	639	680	707	715	544
65°	422	466	512	546	557	419
75°	234	285	342	380	392	249
85°	72	129	191	232	245	75
90°	22	81	145	186	197	16
95°	36	122	580	384	306	35
105°	79	136	462	924	932	85
115°	125	167	396	731	869	124
125°	168	197	368	606	683	150
135°	196	233	339	515	588	152
145°	224	255	325	414	460	141
155°	253	273	316	358	374	117
165°	276	284	303	321	326	78
175°	288	288	291	295	294	27
180°	288	288	288	288	288	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1216.6	1216.6	1216.6	1216.6	1216.6
2.5°	1222.1	1218.0	1207.1	1216.6	1215.3
5°	1218.0	1213.9	1204.4	1215.3	1213.9
7.5°	1209.8	1207.1	1198.9	1211.2	1209.8
10°	1198.9	1197.6	1190.7	1203.0	1201.6
12.5°	1183.9	1183.9	1179.8	1190.7	1190.7
15°	1167.6	1168.9	1164.9	1177.1	1175.8
17.5°	1145.8	1149.9	1148.5	1160.8	1159.4
20°	1122.6	1126.7	1128.1	1141.7	1141.7
22.5°	1096.7	1102.2	1104.9	1118.5	1121.3
25°	1068.1	1076.3	1080.4	1095.4	1096.7
27.5°	1036.8	1049.1	1054.5	1068.1	1069.5
30°	1005.5	1016.4	1025.9	1040.9	1043.6
32.5°	971.4	985.0	995.9	1013.6	1016.4
35°	934.6	951.0	964.6	983.7	987.7
37.5°	897.8	916.9	933.3	952.3	956.4
40°	862.4	880.1	899.2	919.6	925.1
42.5°	821.5	842.0	865.1	888.3	892.4
45°	779.3	805.2	831.1	854.2	861.0
47.5°	739.8	765.7	795.6	818.8	827.0
50°	696.2	726.2	756.1	783.4	791.6
52.5°	652.6	682.6	718.0	745.2	753.4
55°	610.4	639.0	679.8	707.1	715.3
57.5°	562.7	598.1	637.6	670.3	677.1
60°	516.4	551.8	596.7	628.1	639.0
62.5°	471.4	510.9	555.9	587.2	598.1
65°	422.3	465.9	512.3	546.3	557.2
67.5°	376.0	422.3	471.4	505.5	516.4
70°	328.3	374.7	426.4	463.2	472.8
72.5°	282.0	329.7	385.6	421.0	431.9
75°	234.3	284.7	342.0	380.1	392.4
77.5°	189.4	242.5	302.5	340.6	354.2
80°	148.5	203.0	262.9	303.8	314.7
82.5°	107.6	164.9	224.8	267.0	279.3
85°	72.2	129.4	190.7	231.6	245.2
87.5°	45.0	100.8	160.8	200.3	212.5
90°	22.4	80.8	145.1	185.7	197.2
92.5°	28.3	111.8	348.8	238.3	227.4
95°	36.4	121.6	580.4	384.0	305.9
97.5°	47.5	121.1	605.9	614.0	491.5
100°	58.1	124.0	559.1	786.3	669.6
102.5°	69.4	128.9	504.2	890.4	826.0
105°	78.6	135.6	461.7	924.4	932.3
107.5°	91.6	143.9	431.6	904.9	978.5
110°	103.3	151.0	415.5	851.4	972.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	114.3	159.4	403.5	787.6	931.2
115°	124.9	166.8	395.5	731.0	869.1
117.5°	137.4	175.0	388.2	683.7	809.6
120°	148.5	181.5	381.4	649.2	758.4
122.5°	159.8	189.0	374.0	625.0	716.2
125°	168.0	197.4	367.9	606.0	683.1
127.5°	177.1	207.6	360.0	586.4	660.4
130°	183.2	216.0	352.6	565.6	638.6
132.5°	190.5	224.6	346.7	542.3	616.5
135°	195.9	232.8	339.3	515.2	588.5
137.5°	202.7	238.6	333.8	488.0	557.2
140°	210.1	245.1	329.1	461.3	524.8
142.5°	216.7	251.0	326.4	437.5	490.8
145°	224.1	255.0	325.3	414.0	459.6
147.5°	232.6	260.1	323.6	393.3	430.1
150°	240.5	264.9	321.9	379.1	404.6
152.5°	246.5	269.5	319.1	368.4	387.6
155°	253.3	273.4	316.2	358.2	373.5
157.5°	260.1	277.1	313.4	348.5	360.4
160°	266.4	280.2	310.0	338.9	348.5
162.5°	272.0	282.8	306.6	329.6	337.2
165°	276.0	284.5	303.2	321.0	325.9
167.5°	280.5	285.9	299.8	313.6	316.8
170°	283.4	287.0	296.4	306.4	308.3
172.5°	286.2	287.9	293.0	299.8	299.8
175°	287.9	288.5	290.7	294.7	293.6
177.5°	289.0	288.5	289.0	291.0	289.0
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)