

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: P1000744

Luminaire Tested: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000744
REPORT IS A COMBINATION OF REPORTS P995357 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

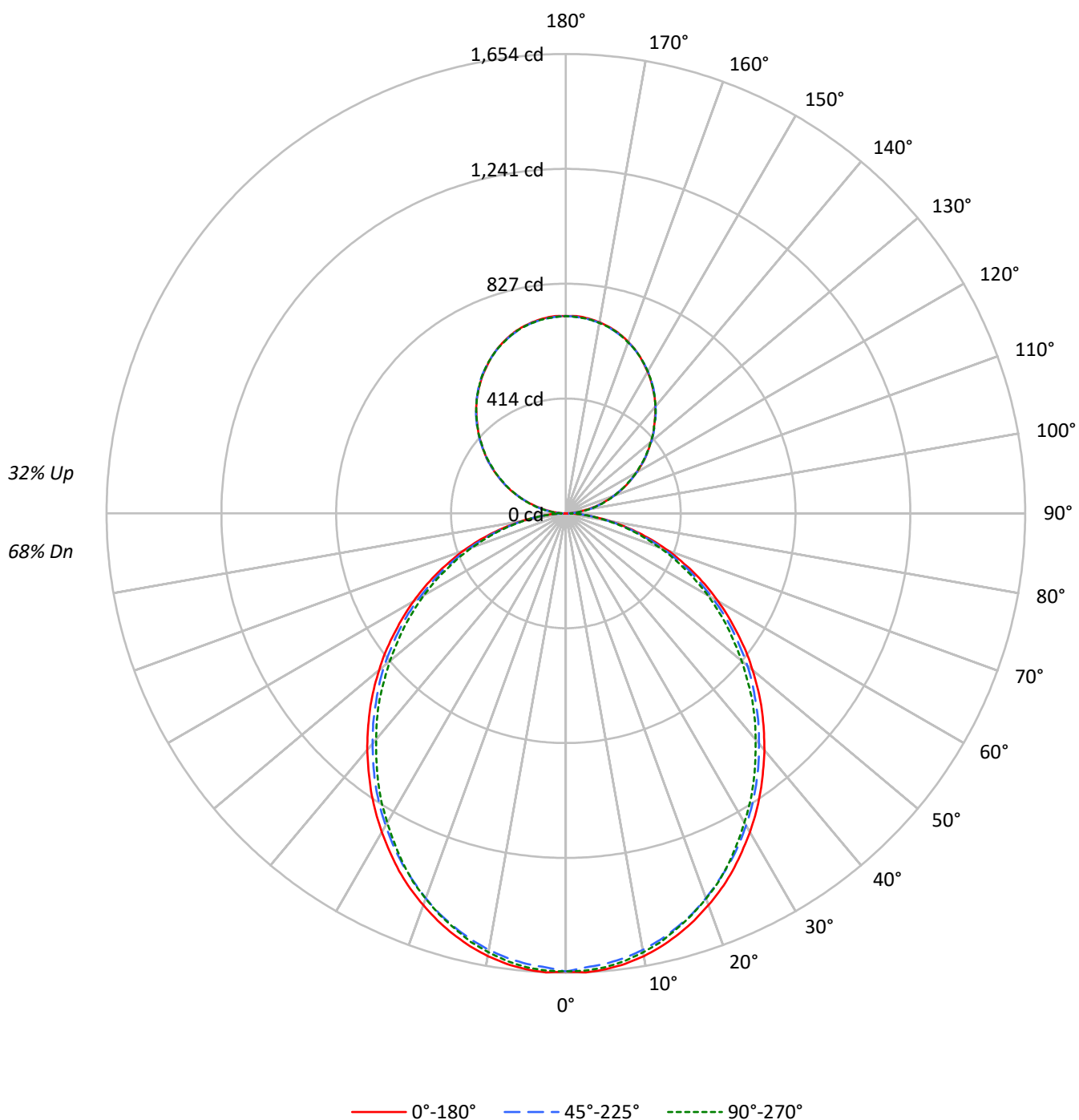
Lumens per Lamp: N/A
Luminaire Lumens: 6206.0 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 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

TEST NUMBER: P1000744

CATALOG NUMBER: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1

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	105	105	105	105	93	93	93	83	83	83	73	73	73
1	102	97	93	90	96	92	88	85	82	79	77	73	71	69	64	63	61
2	93	85	79	73	87	80	75	70	72	67	64	64	61	58	57	54	52
3	85	75	67	61	80	71	64	59	63	58	54	57	52	49	50	47	44
4	77	66	58	52	73	63	55	50	56	50	46	50	46	42	45	41	38
5	71	59	51	45	67	56	49	43	51	44	40	45	40	36	40	36	33
6	66	53	45	39	62	51	43	37	46	39	35	41	36	32	37	33	29
7	61	48	40	34	57	46	38	33	41	35	31	37	32	28	34	29	26
8	57	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23
9	53	40	32	27	50	38	31	26	35	29	25	32	26	23	29	24	21
10	49	37	29	25	47	35	28	24	32	26	22	29	24	21	26	22	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13448	13448	13448
5°	13460	13062	13078
10°	13345	12698	12610
15°	13154	12268	12082
20°	12910	11802	11537
25°	12635	11309	10949
30°	12302	10776	10304
35°	11959	10230	9681
40°	11601	9644	9017
45°	11225	9055	8397
50°	10810	8485	7710
55°	10358	7818	7028
60°	9895	7088	6318
65°	9365	6335	5518
70°	8757	5427	4659
75°	7844	4374	3732
80°	6683	3162	2626
85°	5196	1760	1413

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11225 cd/sqm

TEST NUMBER: P1000744

CATALOG NUMBER: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	155.4	2.5
10°-20°	437.9	7.1
20°-30°	644.5	10.4
30°-40°	749.2	12.1
40°-50°	749.1	12.1
50°-60°	655.2	10.6
60°-70°	486.5	7.8
70°-80°	276.0	4.4
80°-90°	80.6	1.3
90°-100°	46.3	0.7
100°-110°	138.7	2.2
110°-120°	235.6	3.8
120°-130°	310.8	5.0
130°-140°	349.1	5.6
140°-150°	343.1	5.5
150°-160°	288.6	4.6
160°-170°	192.0	3.1
170°-180°	67.2	1.1
0°-30°	1237.9	19.9
0°-40°	1987.1	32.0
0°-60°	3391.5	54.6
0°-90°	4234.5	68.2
90°-120°	420.7	6.8
90°-150°	1423.7	22.9
90°-180°	1971.0	31.8
0°-180°	6206.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1649	1649	1649	1649	1649	
5°	1648	1643	1628	1643	1640	156
15°	1569	1563	1544	1551	1547	442
25°	1421	1411	1393	1394	1389	654
35°	1222	1213	1195	1185	1179	764
45°	998	988	967	953	949	769
55°	755	751	732	716	708	676
65°	511	505	492	478	472	506
75°	272	266	259	254	252	289
85°	71	71	69	69	67	77
90°	2	8	12	15	16	7
95°	33	38	42	43	43	36
105°	128	129	131	132	134	136
115°	240	240	238	238	237	236
125°	349	349	348	347	346	311
135°	450	453	453	452	451	348
145°	547	549	550	549	547	342
155°	626	626	626	628	626	288
165°	682	680	679	682	680	192
175°	709	707	706	710	706	67
180°	710	710	710	710	710	

TEST NUMBER: P1000744

CATALOG NUMBER: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1649.2	1649.2	1649.2	1649.2	1649.2
2.5°	1654.5	1650.5	1636.0	1649.2	1647.9
5°	1647.9	1642.6	1628.1	1642.6	1640.0
7.5°	1636.0	1630.7	1614.8	1626.7	1625.4
10°	1618.8	1613.5	1596.3	1606.9	1604.3
12.5°	1596.3	1591.1	1572.6	1584.5	1580.5
15°	1568.6	1563.3	1543.5	1551.4	1547.4
17.5°	1536.9	1530.3	1511.8	1517.1	1514.4
20°	1501.2	1494.6	1474.8	1478.7	1476.1
22.5°	1462.9	1453.6	1433.8	1441.7	1436.4
25°	1420.6	1411.3	1392.8	1394.2	1388.9
27.5°	1373.0	1363.8	1346.6	1343.9	1337.3
30°	1325.4	1314.9	1297.7	1292.4	1285.8
32.5°	1275.2	1266.0	1247.5	1240.9	1234.3
35°	1222.4	1213.1	1194.6	1185.4	1178.8
37.5°	1166.9	1158.9	1139.1	1129.9	1120.6
40°	1112.7	1102.1	1082.3	1069.1	1062.5
42.5°	1054.5	1049.3	1026.8	1010.9	1007.0
45°	997.7	988.5	967.3	952.8	948.8
47.5°	938.2	931.6	911.8	896.0	885.4
50°	877.5	872.2	853.7	835.2	827.2
52.5°	818.0	811.4	791.6	775.7	765.1
55°	754.6	750.6	732.1	716.2	708.3
57.5°	695.1	691.1	672.6	656.8	648.8
60°	633.0	626.4	609.2	597.3	590.7
62.5°	572.2	566.9	548.4	537.8	531.2
65°	511.4	504.8	491.6	478.4	471.8
67.5°	449.3	444.0	430.8	417.6	416.3
70°	392.5	383.2	372.7	362.1	358.1
72.5°	331.7	322.4	314.5	306.6	302.6
75°	272.2	265.6	259.0	253.7	252.4
77.5°	214.1	211.4	204.8	203.5	199.5
80°	162.5	158.6	155.9	153.3	152.0
82.5°	112.3	111.0	111.0	109.7	108.4
85°	71.4	71.4	68.7	68.7	67.4
87.5°	34.4	33.0	31.7	31.7	31.7
90°	1.6	7.7	12.1	15.4	16.5
92.5°	14.3	21.4	24.2	25.8	26.4
95°	33.0	37.9	41.8	43.4	43.4
97.5°	52.8	57.2	61.5	63.7	63.7
100°	76.9	79.1	84.1	85.2	85.2
102.5°	102.2	102.8	107.2	108.8	109.4
105°	128.0	128.6	130.8	132.4	134.1
107.5°	155.0	155.5	156.1	158.3	157.7
110°	182.4	183.5	183.0	181.9	183.5

TEST NUMBER: P1000744

CATALOG NUMBER: SA4XXDIP-B1020D590UB50-4F0-XX-W2A-F1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	211.0	211.0	209.9	209.9	209.9
115°	239.6	239.6	238.5	237.9	237.4
117.5°	266.5	266.5	266.0	264.3	262.7
120°	293.4	295.6	294.0	291.2	292.3
122.5°	321.5	322.0	321.5	319.8	317.1
125°	348.9	348.9	348.4	347.3	346.2
127.5°	373.7	375.3	374.2	373.1	372.6
130°	400.1	401.7	401.7	400.6	398.4
132.5°	427.0	428.1	427.5	426.4	425.9
135°	450.1	453.4	453.4	452.3	450.6
137.5°	475.9	477.5	478.6	477.0	477.5
140°	501.7	502.8	502.8	502.3	501.7
142.5°	525.3	526.4	525.9	525.9	525.9
145°	546.8	549.0	549.5	549.0	547.3
147.5°	568.8	571.5	571.0	570.4	569.9
150°	588.5	590.7	590.7	590.7	590.2
152.5°	607.2	608.3	608.9	610.5	608.9
155°	626.5	626.5	625.9	628.1	625.9
157.5°	642.9	641.8	641.8	643.5	641.8
160°	657.2	656.7	656.1	657.8	655.0
162.5°	670.4	668.8	668.2	671.5	668.8
165°	682.0	680.3	679.2	682.5	680.3
167.5°	691.3	689.1	689.1	692.4	689.1
170°	699.0	696.3	696.8	700.1	696.3
172.5°	704.5	702.3	702.3	706.1	702.3
175°	709.4	706.7	706.1	710.0	706.1
177.5°	711.6	708.9	708.9	712.7	708.3
180°	710.5	710.5	710.5	710.5	710.5

(END OF REPORT)