

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: P1000528

Luminaire Tested: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000528
REPORT IS A COMBINATION OF REPORTS P995138 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

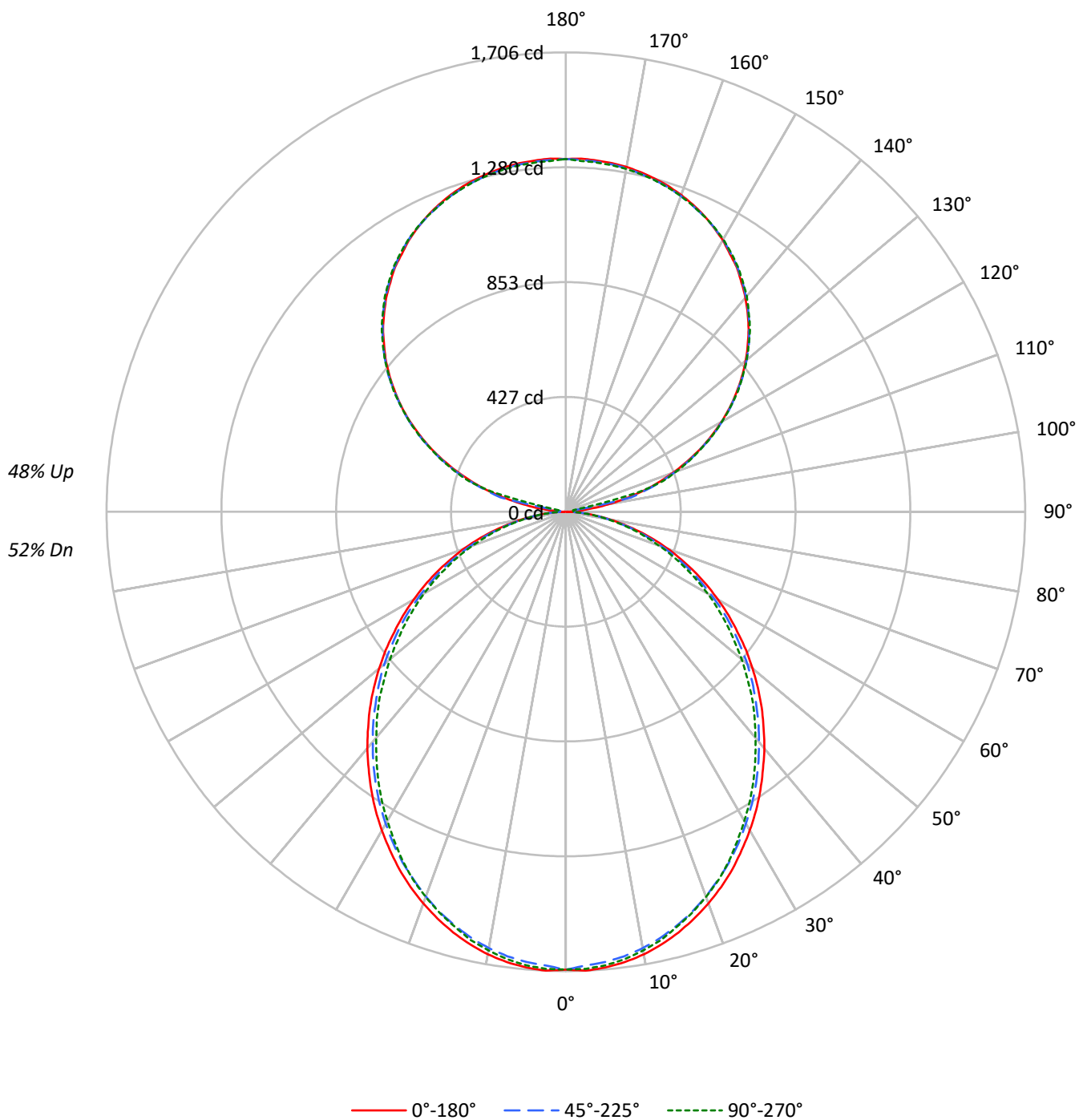
Lumens per Lamp: N/A
Luminaire Lumens: 8420.0 lumens
Efficiency: N/A
Efficacy: 111.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
Input Voltage (V): 120
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: P1000528

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

Luminous Intensity Polar Plot



TEST NUMBER: P1000528

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

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	50	30	10
RCR																				
0	108	108	108	108	99	99	99	99	84	84	84	71	71	71	58	58	58	58	58	58
1	98	94	90	86	91	87	84	80	74	71	69	62	60	59	51	50	49	49	49	44
2	89	82	76	71	82	76	71	66	65	61	57	54	52	49	45	43	41	41	41	37
3	82	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35	35	35	31
4	75	64	56	50	69	59	52	47	51	45	41	43	39	36	36	33	30	30	30	27
5	68	57	49	43	63	53	46	40	45	40	35	39	34	31	32	29	26	26	26	23
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23	23	23	20
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	27	23	21	21	21	18
8	54	42	34	29	50	39	32	27	34	28	24	29	25	21	24	21	18	18	18	16
9	50	38	31	26	47	36	29	24	31	26	22	27	22	19	23	19	17	17	17	14
10	47	35	28	23	44	33	26	22	29	23	20	25	20	17	21	18	15	15	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

TEST NUMBER: P1000528

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	1.9
10°-20°	451.5	5.4
20°-30°	664.5	7.9
30°-40°	772.4	9.2
40°-50°	772.3	9.2
50°-60°	675.5	8.0
60°-70°	501.5	6.0
70°-80°	284.5	3.4
80°-90°	84.2	1.0
90°-100°	43.5	0.5
100°-110°	286.4	3.4
110°-120°	546.8	6.5
120°-130°	694.2	8.2
130°-140°	742.6	8.8
140°-150°	694.4	8.2
150°-160°	560.0	6.7
160°-170°	361.1	4.3
170°-180°	124.5	1.5
0°-30°	1276.2	15.2
0°-40°	2048.6	24.3
0°-60°	3496.5	41.5
0°-90°	4366.7	51.9
90°-120°	876.6	10.4
90°-150°	3007.8	35.7
90°-180°	4053.0	48.1
0°-180°	8420.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	3	14	22	27	29	8
95°	54	21	22	27	28	66
105°	295	301	306	314	279	309
115°	551	554	553	554	554	542
125°	774	778	776	779	780	691
135°	960	959	963	965	967	740
145°	1107	1110	1110	1111	1113	692
155°	1214	1215	1212	1216	1213	560
165°	1280	1276	1276	1283	1275	362
175°	1310	1304	1305	1314	1302	125
180°	1310	1310	1310	1310	1310	

TEST NUMBER: P1000528

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	2.9	13.7	21.6	27.4	29.4
92.5°	14.7	12.7	20.6	26.5	26.5
95°	53.9	20.6	21.6	27.4	28.4
97.5°	102.9	124.4	21.6	26.5	27.4
100°	160.7	178.3	43.1	26.5	27.4
102.5°	225.3	237.1	248.9	28.4	28.4
105°	294.9	300.8	305.7	314.5	279.2
107.5°	358.6	361.5	368.4	373.3	377.2
110°	423.2	426.2	432.1	434.0	437.0

TEST NUMBER: P1000528

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_2700K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	485.9	491.8	493.8	492.8	496.7
115°	550.6	553.5	552.6	554.5	554.5
117.5°	608.4	612.3	615.3	614.3	614.3
120°	667.2	671.1	670.1	672.1	670.1
122.5°	722.1	724.0	726.0	727.0	725.0
125°	774.0	777.9	775.9	778.9	779.9
127.5°	824.0	824.9	829.8	828.9	827.9
130°	872.0	872.9	875.9	876.9	876.9
132.5°	916.0	918.0	921.9	922.9	921.9
135°	960.1	959.2	963.1	965.0	967.0
137.5°	999.3	999.3	1004.2	1006.2	1005.2
140°	1037.5	1039.5	1041.5	1044.4	1045.4
142.5°	1071.8	1075.7	1076.7	1078.7	1078.7
145°	1107.1	1110.0	1110.0	1111.0	1113.0
147.5°	1134.5	1140.4	1139.4	1140.4	1141.4
150°	1164.9	1168.8	1167.8	1167.8	1168.8
152.5°	1190.4	1193.3	1191.4	1193.3	1192.3
155°	1213.9	1214.9	1211.9	1215.8	1212.9
157.5°	1234.5	1234.5	1230.5	1235.4	1230.5
160°	1252.1	1249.2	1248.2	1254.1	1248.2
162.5°	1267.8	1263.9	1262.9	1268.8	1261.9
165°	1280.5	1275.6	1275.6	1283.4	1274.6
167.5°	1291.3	1286.4	1285.4	1294.2	1284.4
170°	1300.1	1294.2	1295.2	1303.0	1293.2
172.5°	1306.0	1300.1	1301.1	1308.9	1298.1
175°	1309.9	1304.0	1305.0	1313.8	1302.1
177.5°	1312.8	1306.0	1307.9	1315.8	1304.0
180°	1309.9	1309.9	1309.9	1309.9	1309.9

(END OF REPORT)