

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: P1000531

Luminaire Tested: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000531
REPORT IS A COMBINATION OF REPORTS P995141 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K
Description: Define 4 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

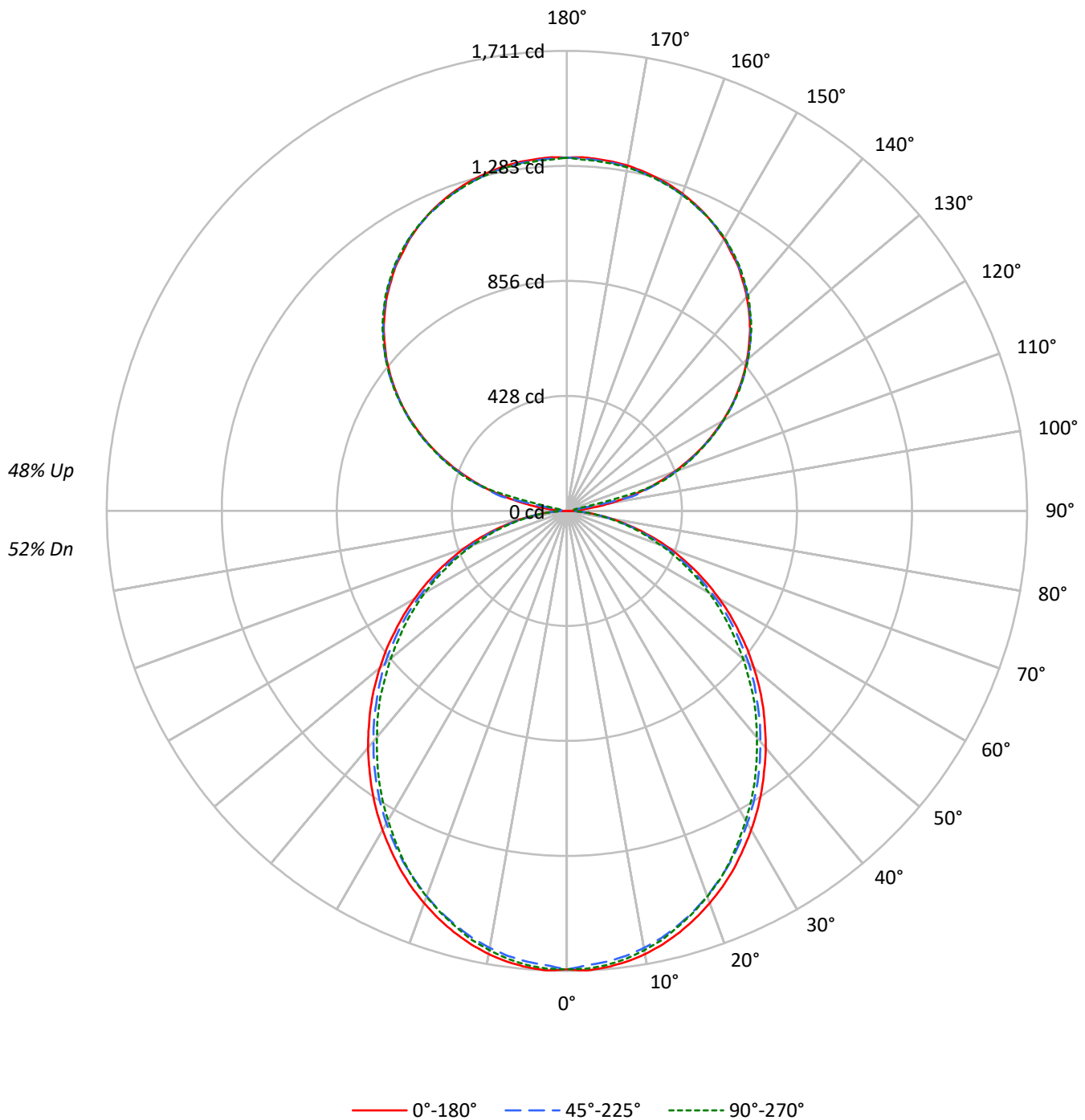
Lumens per Lamp: N/A
Luminaire Lumens: 8445.0 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
Input Voltage (V):
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: P1000531

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

Luminous Intensity Polar Plot



TEST NUMBER: P1000531

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

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°	13906	13906	13906
5°	13917	13506	13522
10°	13800	13130	13039
15°	13602	12685	12494
20°	13349	12203	11929
25°	13064	11693	11321
30°	12721	11142	10654
35°	12365	10579	10010
40°	11995	9972	9324
45°	11608	9363	8683
50°	11177	8773	7973
55°	10710	8084	7267
60°	10231	7329	6533
65°	9684	6550	5705
70°	9053	5611	4818
75°	8112	4522	3859
80°	6914	3269	2714
85°	5370	1822	1461

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11608 cd/sqm

TEST NUMBER: P1000531

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.7	1.9
10°-20°	452.8	5.4
20°-30°	666.4	7.9
30°-40°	774.7	9.2
40°-50°	774.6	9.2
50°-60°	677.5	8.0
60°-70°	503.0	6.0
70°-80°	285.4	3.4
80°-90°	84.5	1.0
90°-100°	43.6	0.5
100°-110°	287.2	3.4
110°-120°	548.4	6.5
120°-130°	696.2	8.2
130°-140°	744.8	8.8
140°-150°	696.4	8.2
150°-160°	561.6	6.7
160°-170°	362.2	4.3
170°-180°	124.8	1.5
0°-30°	1280.0	15.2
0°-40°	2054.7	24.3
0°-60°	3506.8	41.5
0°-90°	4379.7	51.9
90°-120°	879.2	10.4
90°-150°	3016.6	35.7
90°-180°	4065.0	48.1
0°-180°	8445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1704	1698	1683	1698	1696	162
15°	1622	1616	1596	1604	1600	457
25°	1469	1459	1440	1442	1436	676
35°	1264	1254	1235	1226	1219	790
45°	1032	1022	1000	985	981	795
55°	780	776	757	741	732	699
65°	529	522	508	495	488	523
75°	282	275	268	262	261	299
85°	74	74	71	71	70	79
90°	3	14	22	28	30	8
95°	54	21	22	28	28	67
105°	296	302	307	315	280	310
115°	552	555	554	556	556	544
125°	776	780	778	781	782	693
135°	963	962	966	968	970	742
145°	1110	1113	1113	1114	1116	694
155°	1218	1218	1216	1219	1216	561
165°	1284	1279	1279	1287	1278	363
175°	1314	1308	1309	1318	1306	125
180°	1314	1314	1314	1314	1314	

TEST NUMBER: P1000531

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1705.3	1705.3	1705.3	1705.3	1705.3
2.5°	1710.8	1706.7	1691.6	1705.3	1703.9
5°	1703.9	1698.5	1683.4	1698.5	1695.7
7.5°	1691.6	1686.2	1669.8	1682.1	1680.7
10°	1673.9	1668.4	1650.6	1661.6	1658.8
12.5°	1650.6	1645.2	1626.1	1638.4	1634.3
15°	1622.0	1616.5	1596.0	1604.2	1600.1
17.5°	1589.2	1582.3	1563.2	1568.7	1565.9
20°	1552.3	1545.4	1524.9	1529.0	1526.3
22.5°	1512.6	1503.1	1482.6	1490.8	1485.3
25°	1468.9	1459.3	1440.2	1441.6	1436.1
27.5°	1419.7	1410.2	1392.4	1389.7	1382.8
30°	1370.5	1359.6	1341.8	1336.4	1329.5
32.5°	1318.6	1309.0	1289.9	1283.1	1276.2
35°	1263.9	1254.4	1235.3	1225.7	1218.9
37.5°	1206.6	1198.4	1177.9	1168.3	1158.7
40°	1150.5	1139.6	1119.1	1105.4	1098.6
42.5°	1090.4	1084.9	1061.7	1045.3	1041.2
45°	1031.7	1022.1	1000.2	985.2	981.1
47.5°	970.2	963.3	942.8	926.4	915.5
50°	907.3	901.8	882.7	863.6	855.4
52.5°	845.8	839.0	818.5	802.1	791.2
55°	780.2	776.1	757.0	740.6	732.4
57.5°	718.7	714.6	695.5	679.1	670.9
60°	654.5	647.7	629.9	617.6	610.8
62.5°	591.7	586.2	567.1	556.1	549.3
65°	528.8	522.0	508.3	494.6	487.8
67.5°	464.6	459.1	445.5	431.8	430.4
70°	405.8	396.3	385.3	374.4	370.3
72.5°	343.0	333.4	325.2	317.0	312.9
75°	281.5	274.7	267.8	262.4	261.0
77.5°	221.4	218.6	211.8	210.4	206.3
80°	168.1	164.0	161.2	158.5	157.1
82.5°	116.1	114.8	114.8	113.4	112.0
85°	73.8	73.8	71.1	71.1	69.7
87.5°	35.5	34.2	32.8	32.8	32.8
90°	2.9	13.8	21.6	27.5	29.5
92.5°	14.7	12.8	20.6	26.5	26.5
95°	54.0	20.6	21.6	27.5	28.5
97.5°	103.2	124.8	21.6	26.5	27.5
100°	161.2	178.8	43.2	26.5	27.5
102.5°	226.0	237.8	249.6	28.5	28.5
105°	295.8	301.7	306.6	315.4	280.0
107.5°	359.6	362.6	369.5	374.4	378.3
110°	424.5	427.4	433.3	435.3	438.3



TEST NUMBER: P1000531

CATALOG NUMBER: SA4XXDIP-B1020D1035UB2750-4F0-XX-W2A-F_4000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	487.4	493.3	495.2	494.3	498.2
115°	552.2	555.2	554.2	556.2	556.2
117.5°	610.2	614.1	617.1	616.1	616.1
120°	669.2	673.1	672.1	674.1	672.1
122.5°	724.2	726.2	728.1	729.1	727.1
125°	776.3	780.2	778.2	781.2	782.2
127.5°	826.4	827.4	832.3	831.3	830.3
130°	874.5	875.5	878.5	879.5	879.5
132.5°	918.8	920.7	924.7	925.6	924.7
135°	963.0	962.0	965.9	967.9	969.9
137.5°	1002.3	1002.3	1007.2	1009.2	1008.2
140°	1040.6	1042.6	1044.5	1047.5	1048.5
142.5°	1075.0	1078.9	1079.9	1081.9	1081.9
145°	1110.4	1113.3	1113.3	1114.3	1116.3
147.5°	1137.9	1143.8	1142.8	1143.8	1144.8
150°	1168.3	1172.3	1171.3	1171.3	1172.3
152.5°	1193.9	1196.8	1194.9	1196.8	1195.9
155°	1217.5	1218.5	1215.5	1219.4	1216.5
157.5°	1238.1	1238.1	1234.2	1239.1	1234.2
160°	1255.8	1252.9	1251.9	1257.8	1251.9
162.5°	1271.5	1267.6	1266.6	1272.5	1265.6
165°	1284.3	1279.4	1279.4	1287.2	1278.4
167.5°	1295.1	1290.2	1289.2	1298.1	1288.2
170°	1303.9	1298.1	1299.0	1306.9	1297.1
172.5°	1309.8	1303.9	1304.9	1312.8	1302.0
175°	1313.8	1307.9	1308.9	1317.7	1305.9
177.5°	1316.7	1309.8	1311.8	1319.7	1307.9
180°	1313.8	1313.8	1313.8	1313.8	1313.8

(END OF REPORT)