

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: P1000590

Luminaire Tested: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000590
REPORT IS A COMBINATION OF REPORTS P995200 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

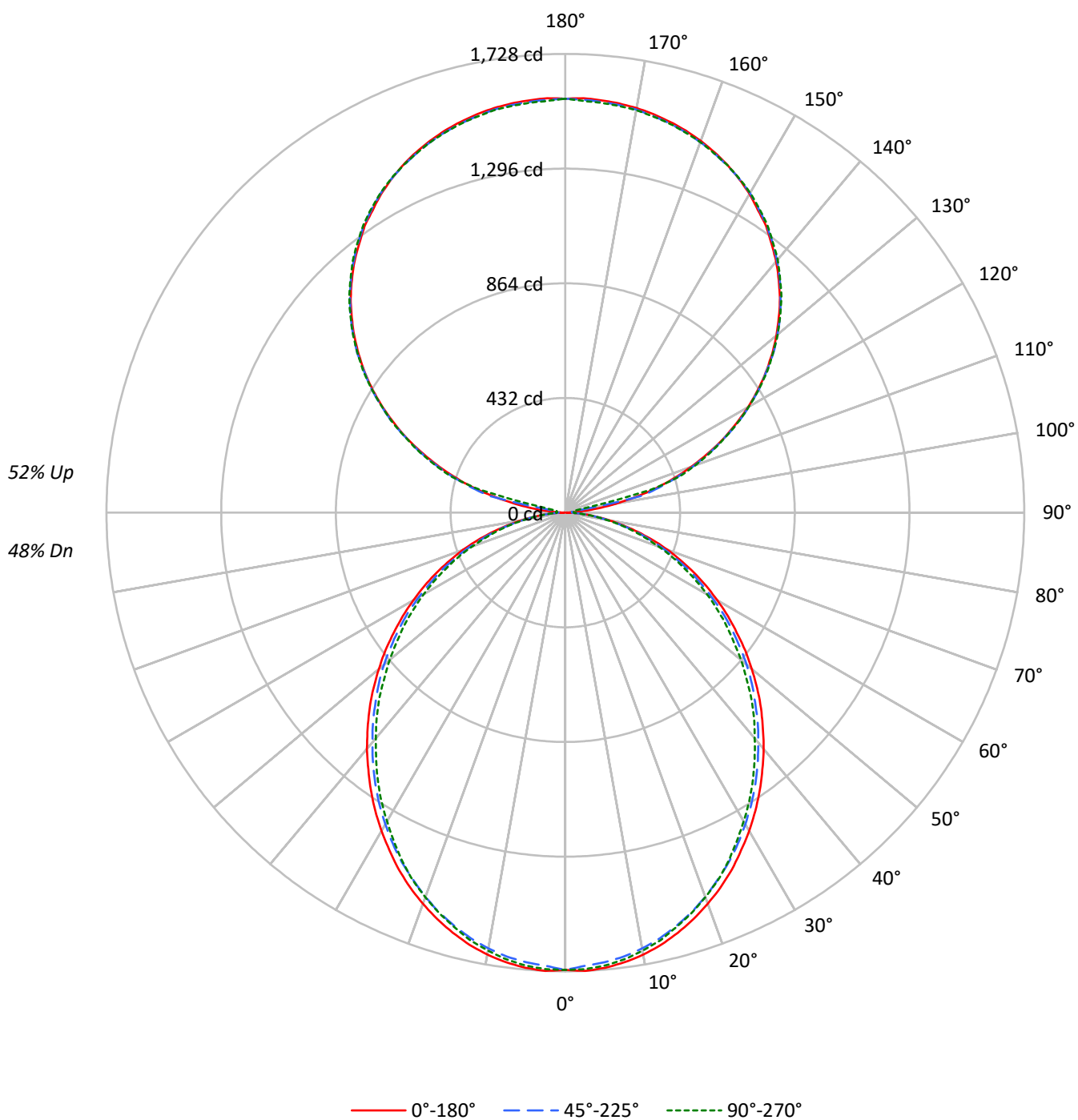
Lumens per Lamp: N/A
Luminaire Lumens: 9249.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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: P1000590

CATALOG NUMBER: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

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
RCR																	
0	107	107	107	107	98	98	98	98	82	82	82		68	68	68		54
1	97	93	89	86	89	86	82	79	72	70	67		59	58	56		48
2	89	81	75	70	81	75	70	65	63	59	56		52	49	47		42
3	81	71	64	58	74	66	59	54	56	51	47		46	43	40		37
4	74	63	55	49	68	58	51	46	49	44	40		41	37	34		33
5	68	56	48	42	62	52	45	40	44	39	34		37	33	29		30
6	62	50	42	36	57	47	40	34	40	34	30		33	29	26		27
7	58	45	38	32	53	42	35	30	36	30	26		30	26	23		25
8	54	41	34	28	49	38	31	27	33	27	23		28	23	20		23
9	50	38	30	25	46	35	28	24	30	25	21		25	21	18		21
10	47	35	27	23	43	32	26	21	28	23	19		24	19	16		20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14045	14045	14045
5°	14058	13642	13658
10°	13938	13262	13170
15°	13739	12812	12620
20°	13483	12326	12049
25°	13196	11811	11436
30°	12849	11254	10762
35°	12491	10685	10110
40°	12116	10073	9418
45°	11723	9457	8771
50°	11289	8861	8053
55°	10818	8165	7341
60°	10334	7403	6598
65°	9781	6615	5762
70°	9145	5668	4866
75°	8193	4568	3897
80°	6984	3304	2741
85°	5421	1840	1476

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11723 cd/sqm

TEST NUMBER: P1000590

CATALOG NUMBER: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.8
10°-20°	457.4	4.9
20°-30°	673.1	7.3
30°-40°	782.5	8.5
40°-50°	782.4	8.5
50°-60°	684.3	7.4
60°-70°	508.0	5.5
70°-80°	288.3	3.1
80°-90°	85.8	0.9
90°-100°	51.8	0.6
100°-110°	340.8	3.7
110°-120°	650.9	7.0
120°-130°	826.3	8.9
130°-140°	883.9	9.6
140°-150°	826.5	8.9
150°-160°	666.5	7.2
160°-170°	429.9	4.6
170°-180°	148.2	1.6
0°-30°	1292.9	14.0
0°-40°	2075.4	22.4
0°-60°	3542.1	38.3
0°-90°	4424.2	47.8
90°-120°	1043.5	11.3
90°-150°	3580.2	38.7
90°-180°	4825.0	52.2
0°-180°	9249.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1722	1722	1722	1722	1722	
5°	1721	1716	1700	1716	1713	163
15°	1638	1633	1612	1620	1616	462
25°	1484	1474	1455	1456	1451	683
35°	1277	1267	1248	1238	1231	798
45°	1042	1032	1010	995	991	803
55°	788	784	765	748	740	706
65°	534	527	513	500	493	529
75°	284	277	270	265	264	302
85°	74	74	72	72	70	80
90°	4	16	26	33	35	8
95°	64	24	26	33	34	79
105°	351	358	364	374	332	367
115°	655	659	658	660	660	645
125°	921	926	924	927	928	823
135°	1143	1142	1146	1149	1151	881
145°	1318	1321	1321	1322	1325	823
155°	1445	1446	1443	1447	1444	666
165°	1524	1518	1518	1528	1517	431
175°	1559	1552	1553	1564	1550	148
180°	1559	1559	1559	1559	1559	

TEST NUMBER: P1000590

CATALOG NUMBER: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1722.4	1722.4	1722.4	1722.4	1722.4
2.5°	1728.0	1723.8	1708.6	1722.4	1721.1
5°	1721.1	1715.5	1700.4	1715.5	1712.8
7.5°	1708.6	1703.1	1686.6	1699.0	1697.6
10°	1690.7	1685.2	1667.2	1678.3	1675.5
12.5°	1667.2	1661.7	1642.4	1654.8	1650.7
15°	1638.3	1632.7	1612.0	1620.3	1616.2
17.5°	1605.1	1598.2	1578.9	1584.4	1581.7
20°	1567.9	1561.0	1540.3	1544.4	1541.6
22.5°	1527.8	1518.2	1497.5	1505.8	1500.2
25°	1483.7	1474.0	1454.7	1456.1	1450.6
27.5°	1434.0	1424.3	1406.4	1403.6	1396.7
30°	1384.3	1373.3	1355.3	1349.8	1342.9
32.5°	1331.9	1322.2	1302.9	1296.0	1289.1
35°	1276.7	1267.0	1247.7	1238.0	1231.1
37.5°	1218.7	1210.4	1189.7	1180.0	1170.4
40°	1162.1	1151.1	1130.4	1116.6	1109.7
42.5°	1101.4	1095.9	1072.4	1055.8	1051.7
45°	1042.0	1032.4	1010.3	995.1	991.0
47.5°	979.9	973.0	952.3	935.8	924.7
50°	916.4	910.9	891.6	872.3	864.0
52.5°	854.3	847.4	826.7	810.2	799.1
55°	788.1	783.9	764.6	748.1	739.8
57.5°	726.0	721.8	702.5	685.9	677.7
60°	661.1	654.2	636.3	623.8	616.9
62.5°	597.6	592.1	572.8	561.7	554.8
65°	534.1	527.2	513.4	499.6	492.7
67.5°	469.3	463.7	449.9	436.1	434.8
70°	409.9	400.2	389.2	378.2	374.0
72.5°	346.4	336.8	328.5	320.2	316.1
75°	284.3	277.4	270.5	265.0	263.6
77.5°	223.6	220.8	213.9	212.5	208.4
80°	169.8	165.6	162.9	160.1	158.7
82.5°	117.3	115.9	115.9	114.6	113.2
85°	74.5	74.5	71.8	71.8	70.4
87.5°	35.9	34.5	33.1	33.1	33.1
90°	3.5	16.3	25.7	32.7	35.0
92.5°	17.5	15.2	24.5	31.5	31.5
95°	64.1	24.5	25.7	32.7	33.8
97.5°	122.5	148.1	25.7	31.5	32.7
100°	191.3	212.2	51.3	31.5	32.7
102.5°	268.2	282.2	296.2	33.8	33.8
105°	351.0	358.0	363.9	374.4	332.4
107.5°	426.8	430.3	438.5	444.3	449.0
110°	503.8	507.3	514.3	516.6	520.1



TEST NUMBER: P1000590

CATALOG NUMBER: SA4XXDIP-B1020D1205UB2750-4F0-XX-W2A-F_3500K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	578.4	585.4	587.8	586.6	591.3
115°	655.4	658.9	657.7	660.1	660.1
117.5°	724.2	728.9	732.4	731.2	731.2
120°	794.2	798.9	797.7	800.0	797.7
122.5°	859.5	861.8	864.2	865.3	863.0
125°	921.3	926.0	923.6	927.1	928.3
127.5°	980.8	981.9	987.8	986.6	985.4
130°	1037.9	1039.1	1042.6	1043.8	1043.8
132.5°	1090.4	1092.7	1097.4	1098.6	1097.4
135°	1142.9	1141.7	1146.4	1148.7	1151.0
137.5°	1189.5	1189.5	1195.4	1197.7	1196.5
140°	1235.0	1237.3	1239.7	1243.2	1244.3
142.5°	1275.8	1280.5	1281.7	1284.0	1284.0
145°	1317.8	1321.3	1321.3	1322.5	1324.8
147.5°	1350.5	1357.5	1356.3	1357.5	1358.6
150°	1386.6	1391.3	1390.1	1390.1	1391.3
152.5°	1416.9	1420.4	1418.1	1420.4	1419.3
155°	1444.9	1446.1	1442.6	1447.3	1443.8
157.5°	1469.4	1469.4	1464.8	1470.6	1464.8
160°	1490.4	1486.9	1485.7	1492.7	1485.7
162.5°	1509.1	1504.4	1503.2	1510.2	1502.1
165°	1524.2	1518.4	1518.4	1527.7	1517.2
167.5°	1537.1	1531.2	1530.1	1540.6	1528.9
170°	1547.6	1540.6	1541.7	1551.1	1539.4
172.5°	1554.6	1547.6	1548.7	1558.1	1545.2
175°	1559.2	1552.2	1553.4	1563.9	1549.9
177.5°	1562.7	1554.6	1556.9	1566.2	1552.2
180°	1559.2	1559.2	1559.2	1559.2	1559.2

(END OF REPORT)