

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: P1000609

Luminaire Tested: SA4XXDIP-B1020D1205UB35-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000609
REPORT IS A COMBINATION OF REPORTS P995219 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D1205UB35-4F0-XX-W2A-F1
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

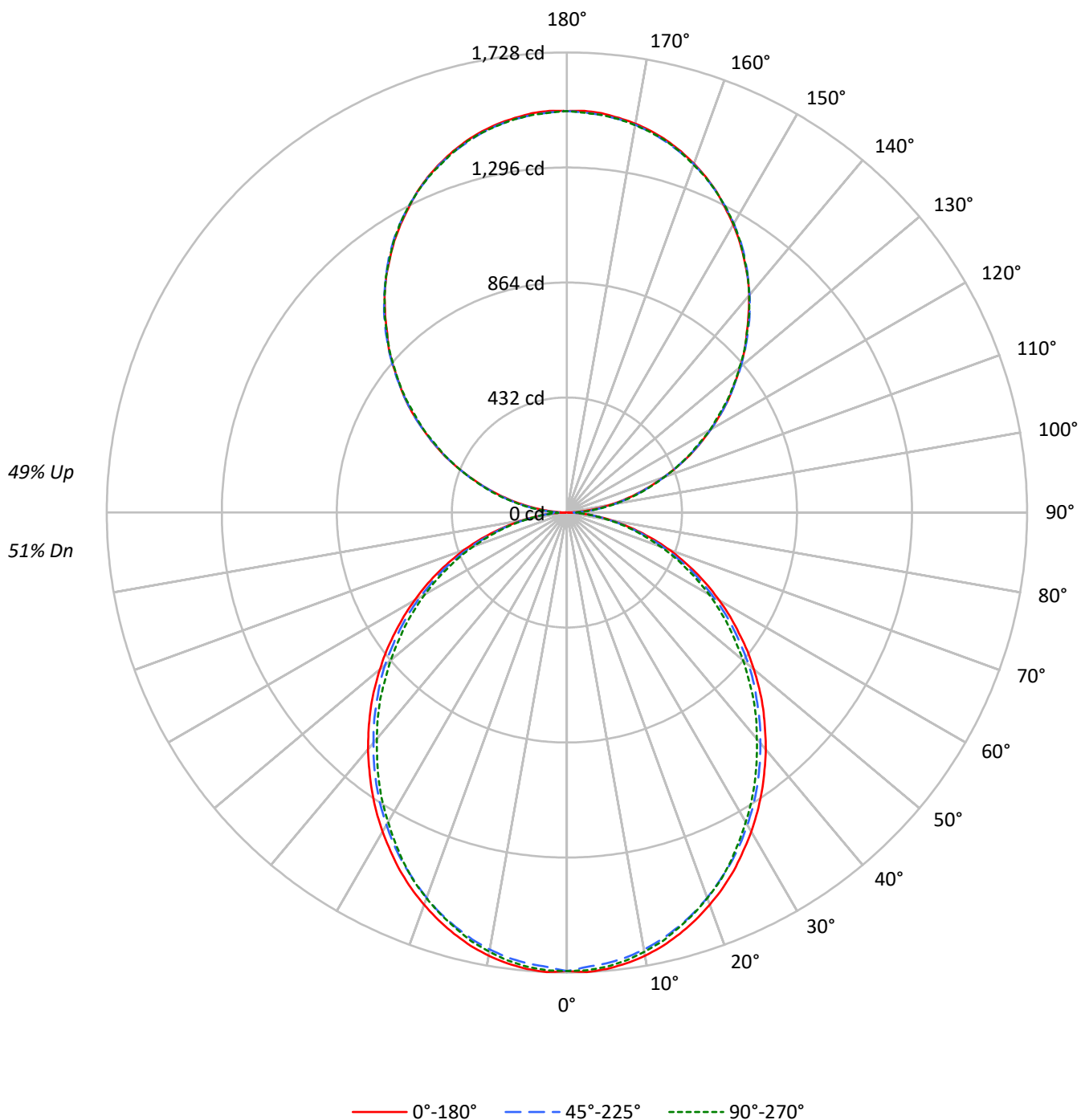
Lumens per Lamp: N/A
Luminaire Lumens: 8608.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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

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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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57
1	98	94	90	86	90	87	83	80	74	71	69	62	60	58	51	49	48
2	89	82	76	70	82	76	70	66	65	61	57	54	51	49	45	43	41
3	81	72	65	59	75	67	60	55	57	52	48	48	44	41	40	37	35
4	75	64	56	50	69	59	52	47	51	45	41	43	39	35	35	32	30
5	68	57	49	43	63	53	46	40	45	40	35	38	34	31	32	29	26
6	63	51	43	37	58	47	40	35	41	35	31	35	30	27	29	26	23
7	58	46	38	32	54	43	36	31	37	31	27	32	27	24	26	23	20
8	54	42	34	29	50	39	32	27	34	28	24	29	24	21	24	21	18
9	50	38	31	26	47	36	29	24	31	25	22	27	22	19	22	19	17
10	47	35	28	23	44	33	26	22	29	23	19	25	20	17	21	17	15

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.3	1.9
10°-20°	457.4	5.3
20°-30°	673.1	7.8
30°-40°	782.5	9.1
40°-50°	782.4	9.1
50°-60°	684.3	7.9
60°-70°	508.0	5.9
70°-80°	288.3	3.3
80°-90°	85.8	1.0
90°-100°	98.3	1.1
100°-110°	294.4	3.4
110°-120°	500.1	5.8
120°-130°	659.6	7.7
130°-140°	740.8	8.6
140°-150°	728.1	8.5
150°-160°	612.4	7.1
160°-170°	407.5	4.7
170°-180°	142.7	1.7
0°-30°	1292.9	15.0
0°-40°	2075.4	24.1
0°-60°	3542.1	41.1
0°-90°	4424.2	51.4
90°-120°	892.8	10.4
90°-150°	3021.3	35.1
90°-180°	4184.0	48.6
0°-180°	8608.0	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	10
95°	70	80	89	92	92	76
105°	272	273	278	281	284	288
115°	508	508	506	505	504	501
125°	740	740	739	737	735	660
135°	955	962	962	960	956	739
145°	1160	1165	1166	1165	1162	726
155°	1329	1329	1328	1333	1328	612
165°	1447	1444	1441	1448	1444	408
175°	1506	1500	1498	1507	1498	143
180°	1508	1508	1508	1508	1508	

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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°	30.3	45.5	51.3	54.8	56.0
95°	70.0	80.5	88.6	92.1	92.1
97.5°	112.0	121.3	130.6	135.3	135.3
100°	163.3	167.9	178.4	180.8	180.8
102.5°	216.9	218.1	227.4	230.9	232.1
105°	271.7	272.9	277.6	281.0	284.5
107.5°	328.9	330.0	331.2	335.9	334.7
110°	387.2	389.5	388.3	386.0	389.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	447.8	447.8	445.5	445.5	445.5
115°	508.5	508.5	506.1	505.0	503.8
117.5°	565.6	565.6	564.4	560.9	557.4
120°	622.7	627.4	623.9	618.1	620.4
122.5°	682.2	683.4	682.2	678.7	672.9
125°	740.5	740.5	739.4	737.0	734.7
127.5°	793.0	796.5	794.2	791.8	790.7
130°	849.0	852.5	852.5	850.1	845.5
132.5°	906.1	908.5	907.3	905.0	903.8
135°	955.1	962.1	962.1	959.8	956.3
137.5°	1009.9	1013.4	1015.7	1012.2	1013.4
140°	1064.7	1067.1	1067.1	1065.9	1064.7
142.5°	1114.9	1117.2	1116.0	1116.0	1116.0
145°	1160.3	1165.0	1166.2	1165.0	1161.5
147.5°	1207.0	1212.8	1211.7	1210.5	1209.3
150°	1249.0	1253.6	1253.6	1253.6	1252.5
152.5°	1288.6	1291.0	1292.1	1295.6	1292.1
155°	1329.4	1329.4	1328.3	1332.9	1328.3
157.5°	1364.4	1362.1	1362.1	1365.6	1362.1
160°	1394.7	1393.6	1392.4	1395.9	1390.1
162.5°	1422.7	1419.2	1418.1	1425.1	1419.2
165°	1447.2	1443.7	1441.4	1448.4	1443.7
167.5°	1467.1	1462.4	1462.4	1469.4	1462.4
170°	1483.4	1477.5	1478.7	1485.7	1477.5
172.5°	1495.0	1490.4	1490.4	1498.5	1490.4
175°	1505.5	1499.7	1498.5	1506.7	1498.5
177.5°	1510.2	1504.4	1504.4	1512.5	1503.2
180°	1507.9	1507.9	1507.9	1507.9	1507.9

(END OF REPORT)