

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: P1000776

Luminaire Tested: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-F

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000776
REPORT IS A COMBINATION OF REPORTS P995389 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-F
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

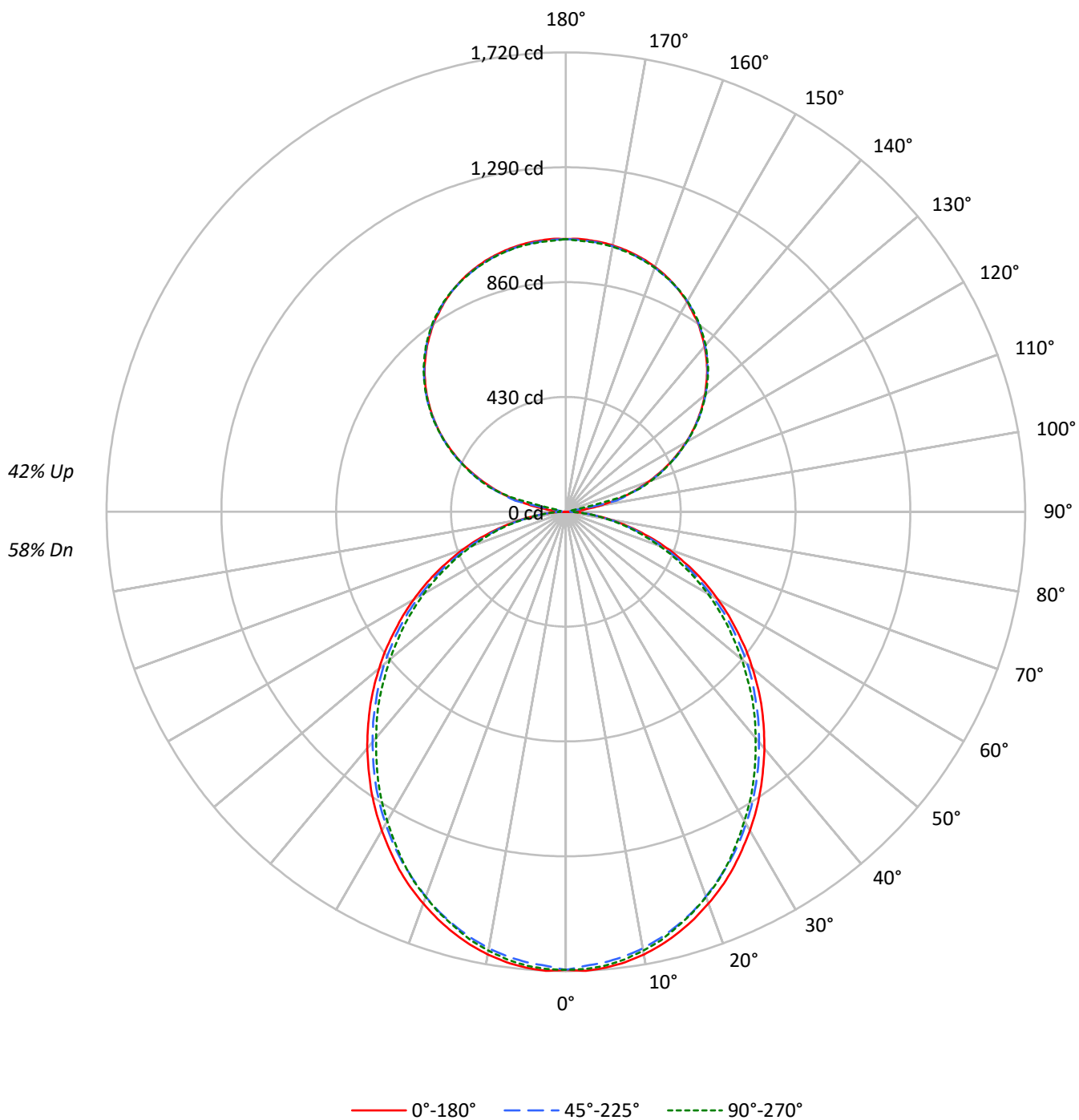
Lumens per Lamp: N/A
Luminaire Lumens: 7563.0 lumens
Efficiency: N/A
Efficacy: 111.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 67.9
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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64
1	100	95	91	88	93	89	85	82	77	75	72	66	64	63	56	55	54
2	91	83	77	72	84	78	72	68	68	63	60	58	55	52	49	47	45
3	83	73	66	60	77	68	62	56	60	54	50	51	48	44	44	41	38
4	76	65	57	51	70	61	53	48	53	47	43	46	41	38	39	36	33
5	70	58	49	43	65	54	47	41	47	42	37	41	37	33	35	32	29
6	64	52	44	38	60	49	41	36	43	37	32	37	33	29	32	28	25
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	26	23
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18
10	48	36	28	24	45	34	27	23	30	24	21	26	22	19	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13985	13985	13985
5°	13997	13583	13599
10°	13878	13206	13113
15°	13679	12758	12565
20°	13425	12272	11997
25°	13139	11760	11386
30°	12794	11206	10715
35°	12437	10639	10067
40°	12064	10029	9377
45°	11673	9416	8733
50°	11241	8824	8018
55°	10771	8130	7309
60°	10291	7371	6570
65°	9739	6587	5738
70°	9105	5643	4845
75°	8158	4550	3881
80°	6951	3290	2729
85°	5399	1832	1469

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11673 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	161.6	2.1
10°-20°	455.4	6.0
20°-30°	670.3	8.9
30°-40°	779.1	10.3
40°-50°	779.0	10.3
50°-60°	681.4	9.0
60°-70°	505.9	6.7
70°-80°	287.0	3.8
80°-90°	84.3	1.1
90°-100°	33.9	0.4
100°-110°	223.2	3.0
110°-120°	426.1	5.6
120°-130°	541.0	7.2
130°-140°	578.7	7.7
140°-150°	541.2	7.2
150°-160°	436.4	5.8
160°-170°	281.4	3.7
170°-180°	97.0	1.3
0°-30°	1287.3	17.0
0°-40°	2066.5	27.3
0°-60°	3526.9	46.6
0°-90°	4404.1	58.2
90°-120°	683.2	9.0
90°-150°	2344.0	31.0
90°-180°	3159.0	41.8
0°-180°	7563.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1715	1715	1715	1715	1715	
5°	1714	1708	1693	1708	1705	163
15°	1631	1626	1605	1613	1609	460
25°	1477	1468	1448	1450	1444	680
35°	1271	1262	1242	1233	1226	795
45°	1038	1028	1006	991	987	800
55°	785	781	761	745	737	703
65°	532	525	511	498	491	526
75°	283	276	269	264	262	300
85°	74	74	72	72	70	80
90°	2	11	17	21	23	7
95°	42	16	17	21	22	52
105°	230	234	238	245	218	241
115°	429	431	431	432	432	422
125°	603	606	605	607	608	539
135°	748	748	751	752	754	577
145°	863	865	865	866	867	539
155°	946	947	944	948	945	436
165°	998	994	994	1000	993	282
175°	1021	1016	1017	1024	1015	97
180°	1021	1021	1021	1021	1021	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1715.0	1715.0	1715.0	1715.0	1715.0
2.5°	1720.5	1716.4	1701.3	1715.0	1713.7
5°	1713.7	1708.2	1693.1	1708.2	1705.4
7.5°	1701.3	1695.8	1679.3	1691.7	1690.3
10°	1683.4	1677.9	1660.1	1671.1	1668.3
12.5°	1660.1	1654.6	1635.3	1647.7	1643.6
15°	1631.2	1625.7	1605.1	1613.4	1609.2
17.5°	1598.2	1591.4	1572.1	1577.6	1574.9
20°	1561.1	1554.3	1533.6	1537.8	1535.0
22.5°	1521.3	1511.7	1491.0	1499.3	1493.8
25°	1477.3	1467.7	1448.4	1449.8	1444.3
27.5°	1427.8	1418.2	1400.3	1397.6	1390.7
30°	1378.4	1367.4	1349.5	1344.0	1337.1
32.5°	1326.1	1316.5	1297.3	1290.4	1283.5
35°	1271.2	1261.5	1242.3	1232.7	1225.8
37.5°	1213.5	1205.2	1184.6	1175.0	1165.4
40°	1157.1	1146.1	1125.5	1111.8	1104.9
42.5°	1096.6	1091.1	1067.8	1051.3	1047.2
45°	1037.5	1027.9	1005.9	990.8	986.7
47.5°	975.7	968.8	948.2	931.7	920.7
50°	912.5	907.0	887.8	868.5	860.3
52.5°	850.7	843.8	823.2	806.7	795.7
55°	784.7	780.6	761.3	744.8	736.6
57.5°	722.8	718.7	699.5	683.0	674.7
60°	658.3	651.4	633.5	621.2	614.3
62.5°	595.0	589.5	570.3	559.3	552.4
65°	531.8	525.0	511.2	497.5	490.6
67.5°	467.2	461.7	448.0	434.3	432.9
70°	408.1	398.5	387.5	376.5	372.4
72.5°	344.9	335.3	327.1	318.8	314.7
75°	283.1	276.2	269.4	263.9	262.5
77.5°	222.6	219.9	213.0	211.6	207.5
80°	169.0	164.9	162.2	159.4	158.0
82.5°	116.8	115.4	115.4	114.1	112.7
85°	74.2	74.2	71.5	71.5	70.1
87.5°	35.7	34.4	33.0	33.0	33.0
90°	2.3	10.7	16.8	21.4	22.9
92.5°	11.5	9.9	16.0	20.6	20.6
95°	42.0	16.0	16.8	21.4	22.1
97.5°	80.2	97.0	16.8	20.6	21.4
100°	125.2	139.0	33.6	20.6	21.4
102.5°	175.6	184.8	193.9	22.1	22.1
105°	229.8	234.4	238.2	245.1	217.6
107.5°	279.5	281.7	287.1	290.9	294.0
110°	329.9	332.1	336.7	338.2	340.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	378.7	383.3	384.8	384.1	387.1
115°	429.1	431.4	430.6	432.2	432.2
117.5°	474.2	477.2	479.5	478.7	478.7
120°	520.0	523.0	522.3	523.8	522.3
122.5°	562.7	564.3	565.8	566.5	565.0
125°	603.2	606.3	604.7	607.0	607.8
127.5°	642.1	642.9	646.7	646.0	645.2
130°	679.6	680.3	682.6	683.4	683.4
132.5°	713.9	715.4	718.5	719.3	718.5
135°	748.3	747.5	750.6	752.1	753.6
137.5°	778.8	778.8	782.6	784.2	783.4
140°	808.6	810.1	811.6	813.9	814.7
142.5°	835.3	838.4	839.1	840.7	840.7
145°	862.8	865.1	865.1	865.9	867.4
147.5°	884.2	888.8	888.0	888.8	889.5
150°	907.9	910.9	910.1	910.1	910.9
152.5°	927.7	930.0	928.5	930.0	929.2
155°	946.0	946.8	944.5	947.6	945.3
157.5°	962.1	962.1	959.0	962.8	959.0
160°	975.8	973.5	972.8	977.3	972.8
162.5°	988.0	985.0	984.2	988.8	983.4
165°	998.0	994.1	994.1	1000.2	993.4
167.5°	1006.3	1002.5	1001.8	1008.6	1001.0
170°	1013.2	1008.6	1009.4	1015.5	1007.9
172.5°	1017.8	1013.2	1014.0	1020.1	1011.7
175°	1020.9	1016.3	1017.0	1023.9	1014.7
177.5°	1023.1	1017.8	1019.3	1025.4	1016.3
180°	1020.9	1020.9	1020.9	1020.9	1020.9

(END OF REPORT)