

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: P1000778

Luminaire Tested: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000778
REPORT IS A COMBINATION OF REPORTS P995391 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-F4
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

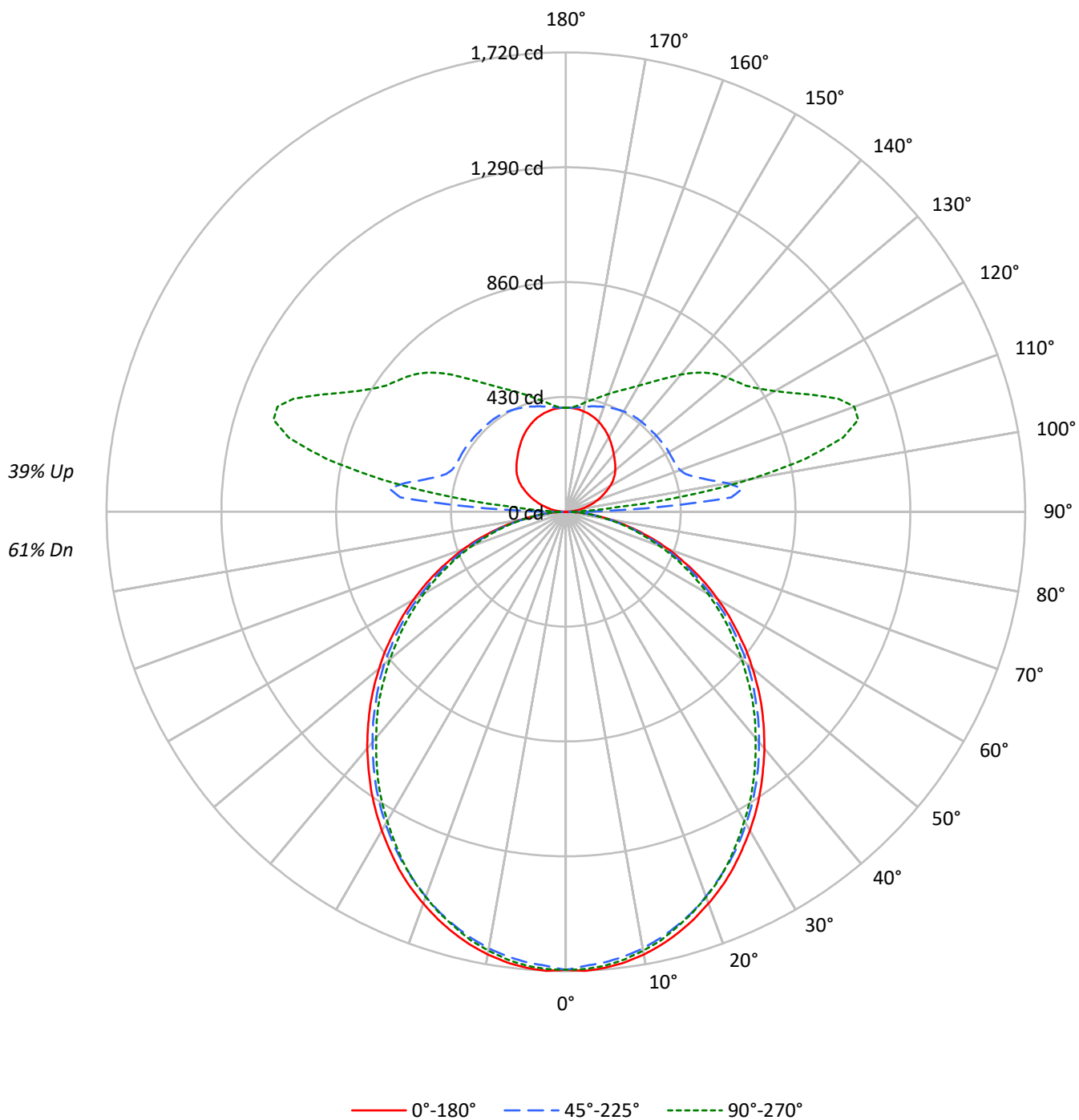
Lumens per Lamp: N/A
Luminaire Lumens: 7240.7 lumens
Efficiency: N/A
Efficacy: 106.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	89	89	89	77	77	77	66	66	66
1	100	96	92	88	94	90	86	83	78	76	73	68	66	64	58	57	56
2	91	84	77	72	85	78	73	68	69	64	61	60	56	54	51	49	47
3	83	74	66	60	78	69	62	57	61	55	51	53	49	45	45	43	40
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	37	34
5	70	58	50	44	65	55	47	42	48	42	38	42	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	37	33	38	33	30	33	29	26
7	60	47	39	33	56	45	37	32	40	33	29	35	30	26	30	27	24
8	55	43	35	30	52	41	33	28	36	30	26	32	27	23	28	24	21
9	52	39	32	26	48	37	30	25	33	27	23	29	25	21	26	22	19
10	48	36	29	24	45	34	27	23	31	25	21	27	22	19	24	20	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	2.2
10°-20°	455.4	6.3
20°-30°	670.3	9.3
30°-40°	779.1	10.8
40°-50°	779.0	10.8
50°-60°	681.4	9.4
60°-70°	505.9	7.0
70°-80°	287.0	4.0
80°-90°	83.7	1.2
90°-100°	288.8	4.0
100°-110°	587.3	8.1
110°-120°	523.5	7.2
120°-130°	439.8	6.1
130°-140°	367.0	5.1
140°-150°	280.3	3.9
150°-160°	197.0	2.7
160°-170°	115.9	1.6
170°-180°	37.7	0.5
0°-30°	1287.3	17.8
0°-40°	2066.5	28.5
0°-60°	3526.9	48.7
0°-90°	4403.5	60.8
90°-120°	1399.6	19.3
90°-150°	2486.6	34.3
90°-180°	2837.0	39.2
0°-180°	7240.7	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°	1	6	14	15	16	7
95°	25	79	622	308	186	28
105°	89	129	501	1079	1075	95
115°	157	197	447	858	1032	156
125°	219	260	444	731	823	195
135°	260	310	441	648	736	201
145°	300	344	438	547	601	188
155°	341	369	426	483	503	157
165°	372	383	409	433	439	105
175°	388	389	392	397	396	37
180°	389	389	389	389	389	

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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°	0.8	6.1	13.7	15.3	16.0
92.5°	10.7	58.8	299.4	99.0	69.5
95°	25.2	79.4	622.5	308.2	186.4
97.5°	42.0	87.8	666.0	629.4	447.6
100°	58.0	99.3	614.1	870.8	700.4
102.5°	73.3	113.0	549.2	1022.0	920.4
105°	89.4	129.4	501.0	1078.8	1074.6
107.5°	106.9	146.2	469.7	1061.6	1148.0
110°	124.5	163.1	455.2	1000.6	1149.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	141.3	179.9	448.3	925.7	1104.4
115°	157.3	197.4	446.8	858.5	1031.9
117.5°	174.1	213.9	446.0	805.8	960.8
120°	190.9	229.9	446.0	770.3	902.8
122.5°	206.2	245.6	445.3	747.0	857.0
125°	219.2	260.5	444.5	730.6	823.4
127.5°	231.4	274.2	443.0	714.9	802.0
130°	241.4	287.6	442.2	696.2	783.6
132.5°	251.3	299.0	441.5	674.0	763.0
135°	260.4	310.1	440.7	648.4	736.3
137.5°	269.6	319.6	440.7	621.0	705.0
140°	279.5	328.5	439.9	594.2	670.6
142.5°	290.2	336.4	439.9	569.4	633.9
145°	300.2	343.7	438.4	546.9	601.1
147.5°	311.6	350.5	436.1	528.2	570.5
150°	322.3	357.0	433.8	511.0	545.3
152.5°	332.2	363.2	430.0	496.4	522.4
155°	341.4	368.6	426.2	482.7	503.3
157.5°	350.6	373.5	422.4	469.7	485.8
160°	359.0	377.7	417.8	456.8	469.7
162.5°	366.6	381.2	413.2	444.2	454.4
165°	372.0	383.4	408.6	432.7	439.2
167.5°	378.1	385.3	404.0	422.8	427.0
170°	381.9	386.8	399.5	412.8	415.5
172.5°	385.7	388.0	394.9	404.0	404.0
175°	388.0	388.8	391.8	397.2	395.6
177.5°	389.5	388.8	389.5	392.2	389.5
180°	388.8	388.8	388.8	388.8	388.8

(END OF REPORT)