

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: P1000777

Luminaire Tested: SA4XXDIP-B1020D810UB30-4F0-XX-W2A-F1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000777
REPORT IS A COMBINATION OF REPORTS P995390 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-F1
Description: Define 4 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

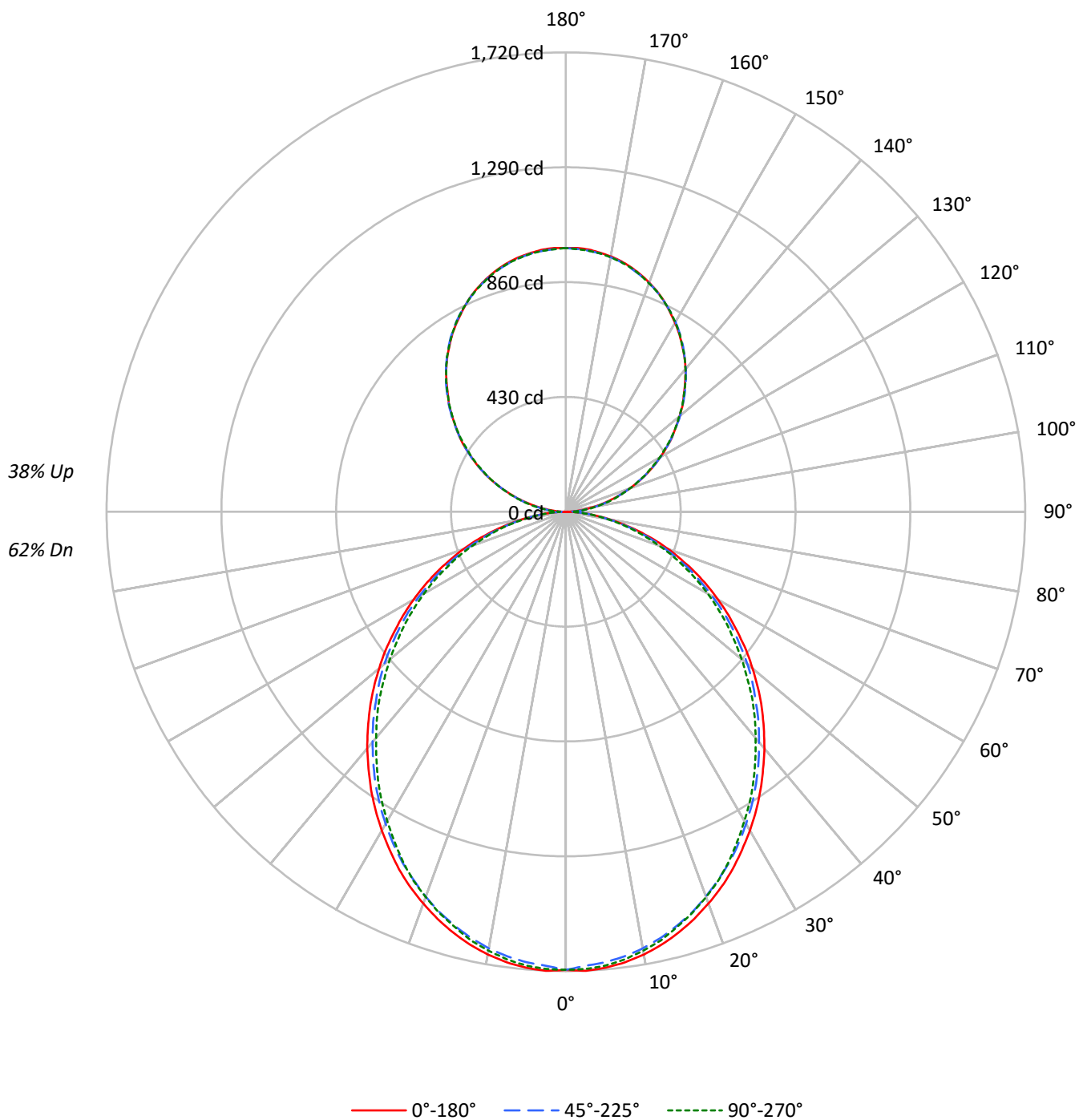
Lumens per Lamp: N/A
Luminaire Lumens: 7143.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	90	90	90	78	78	78	67	67	67
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	47
3	83	74	66	60	78	69	63	57	61	56	51	53	49	46	46	43	40
4	76	65	57	51	71	61	54	49	54	48	44	47	43	39	41	38	35
5	70	58	50	44	65	55	47	42	49	43	38	43	38	34	37	33	30
6	65	52	44	38	60	49	42	36	44	38	33	39	34	30	34	30	27
7	60	47	39	33	56	45	37	32	40	34	29	35	30	27	31	27	24
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21
9	52	39	32	27	48	37	30	25	33	27	23	30	25	21	26	22	19
10	48	36	29	24	45	34	28	23	31	25	21	27	23	19	24	20	18

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	2.3
10°-20°	455.4	6.4
20°-30°	670.3	9.4
30°-40°	779.1	10.9
40°-50°	779.0	10.9
50°-60°	681.4	9.5
60°-70°	505.9	7.1
70°-80°	287.0	4.0
80°-90°	84.3	1.2
90°-100°	64.3	0.9
100°-110°	192.7	2.7
110°-120°	327.4	4.6
120°-130°	431.8	6.0
130°-140°	485.0	6.8
140°-150°	476.7	6.7
150°-160°	400.9	5.6
160°-170°	266.7	3.7
170°-180°	93.4	1.3
0°-30°	1287.3	18.0
0°-40°	2066.5	28.9
0°-60°	3526.9	49.4
0°-90°	4404.1	61.7
90°-120°	584.5	8.2
90°-150°	1977.9	27.7
90°-180°	2739.0	38.3
0°-180°	7143.0	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	8
95°	46	53	58	60	60	50
105°	178	179	182	184	186	189
115°	333	333	331	331	330	328
125°	485	485	484	482	481	432
135°	625	630	630	628	626	484
145°	760	763	763	763	760	475
155°	870	870	870	873	870	401
165°	947	945	944	948	945	267
175°	986	982	981	986	981	94
180°	987	987	987	987	987	

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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°	19.8	29.8	33.6	35.9	36.6
95°	45.8	52.7	58.0	60.3	60.3
97.5°	73.3	79.4	85.5	88.6	88.6
100°	106.9	109.9	116.8	118.3	118.3
102.5°	142.0	142.8	148.9	151.2	151.9
105°	177.9	178.6	181.7	184.0	186.3
107.5°	215.3	216.1	216.8	219.9	219.1
110°	253.5	255.0	254.2	252.7	255.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	293.2	293.2	291.6	291.6	291.6
115°	332.9	332.9	331.3	330.6	329.8
117.5°	370.3	370.3	369.5	367.2	364.9
120°	407.7	410.7	408.4	404.6	406.1
122.5°	446.6	447.4	446.6	444.3	440.5
125°	484.8	484.8	484.0	482.5	481.0
127.5°	519.1	521.4	519.9	518.4	517.6
130°	555.8	558.1	558.1	556.5	553.5
132.5°	593.2	594.7	594.0	592.4	591.7
135°	625.3	629.8	629.8	628.3	626.0
137.5°	661.1	663.4	664.9	662.7	663.4
140°	697.0	698.5	698.5	697.8	697.0
142.5°	729.8	731.4	730.6	730.6	730.6
145°	759.6	762.7	763.4	762.7	760.4
147.5°	790.2	794.0	793.2	792.4	791.7
150°	817.6	820.7	820.7	820.7	819.9
152.5°	843.6	845.1	845.9	848.2	845.9
155°	870.3	870.3	869.5	872.6	869.5
157.5°	893.2	891.7	891.7	894.0	891.7
160°	913.1	912.3	911.5	913.8	910.0
162.5°	931.4	929.1	928.3	932.9	929.1
165°	947.4	945.1	943.6	948.2	945.1
167.5°	960.4	957.3	957.3	961.9	957.3
170°	971.1	967.3	968.0	972.6	967.3
172.5°	978.7	975.7	975.7	981.0	975.7
175°	985.6	981.8	981.0	986.4	981.0
177.5°	988.6	984.8	984.8	990.2	984.1
180°	987.1	987.1	987.1	987.1	987.1

(END OF REPORT)