

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: P1000646

Luminaire Tested: SA4XXDIP-B1020D365UB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000646
REPORT IS A COMBINATION OF REPORTS P995258 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D365UB2750-4F0-XX-W2A-F_2700K
Description: Define 4 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

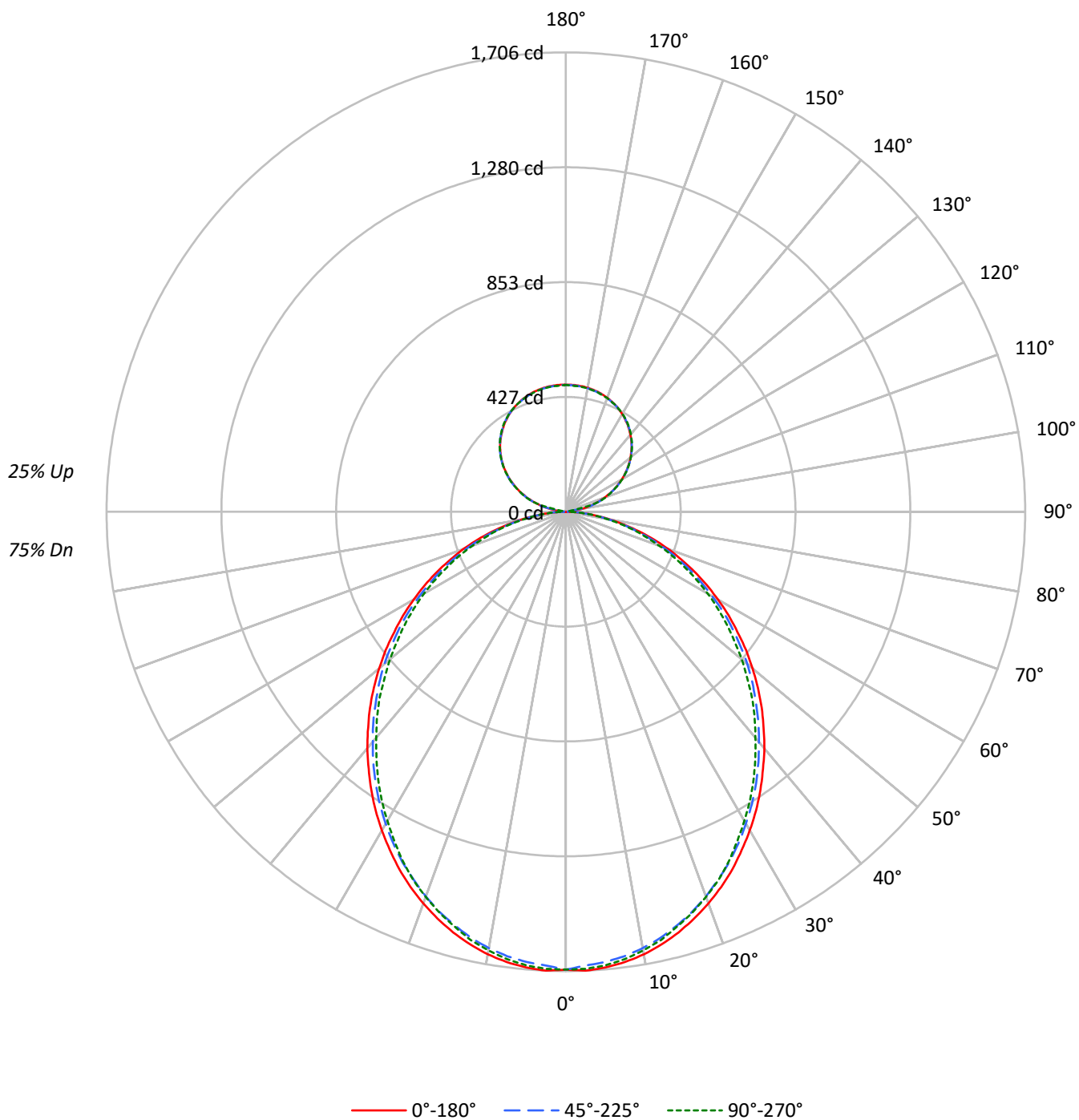
Lumens per Lamp: N/A
Luminaire Lumens: 5823.0 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
Input Voltage (V): 120
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	50	30	10
RCR																				
0	113	113	113	113	108	108	108	108	97	97	97	88	88	88	79	79	79	79	79	79
1	103	99	95	91	98	94	91	87	85	83	80	77	75	73	70	68	67	67	67	63
2	94	86	80	74	89	82	77	72	75	70	66	68	64	61	61	59	56	56	56	53
3	86	76	68	62	81	73	66	60	66	60	56	60	56	52	54	51	48	48	48	45
4	79	67	59	53	75	64	57	51	59	53	48	54	49	44	49	45	41	41	41	38
5	72	60	52	45	69	58	50	44	53	46	41	48	43	39	44	40	36	36	36	33
6	67	54	46	40	63	52	44	38	48	41	36	44	38	34	40	35	32	32	32	29
7	62	49	41	35	59	47	39	34	43	37	32	40	34	30	36	32	28	28	28	26
8	58	45	37	31	55	43	35	30	40	33	29	36	31	27	34	29	25	25	25	23
9	54	41	33	28	51	39	32	27	36	30	26	34	28	24	31	26	23	23	23	21
10	50	38	30	25	48	36	29	25	34	28	23	31	26	22	29	24	21	21	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13864	13864	13864
5°	13876	13466	13482
10°	13758	13091	13000
15°	13561	12648	12456
20°	13310	12167	11894
25°	13026	11658	11288
30°	12684	11109	10623
35°	12329	10547	9980
40°	11960	9942	9296
45°	11573	9336	8657
50°	11144	8747	7948
55°	10678	8061	7246
60°	10201	7308	6513
65°	9655	6530	5688
70°	9027	5595	4803
75°	8086	4509	3847
80°	6893	3261	2707
85°	5356	1814	1457

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 11573 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.3	2.8
10°-20°	451.5	7.8
20°-30°	664.5	11.4
30°-40°	772.4	13.3
40°-50°	772.3	13.3
50°-60°	675.5	11.6
60°-70°	501.5	8.6
70°-80°	284.5	4.9
80°-90°	82.5	1.4
90°-100°	15.7	0.3
100°-110°	103.0	1.8
110°-120°	196.7	3.4
120°-130°	249.7	4.3
130°-140°	267.1	4.6
140°-150°	249.8	4.3
150°-160°	201.4	3.5
160°-170°	129.9	2.2
170°-180°	44.8	0.8
0°-30°	1276.2	21.9
0°-40°	2048.6	35.2
0°-60°	3496.5	60.0
0°-90°	4365.0	75.0
90°-120°	315.4	5.4
90°-150°	1081.9	18.6
90°-180°	1458.0	25.0
0°-180°	5823.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1700	1700	1700	1700	1700	
5°	1699	1693	1678	1693	1691	161
15°	1617	1612	1591	1599	1595	456
25°	1465	1455	1436	1437	1432	674
35°	1260	1251	1232	1222	1215	788
45°	1029	1019	997	982	978	793
55°	778	774	755	738	730	697
65°	527	520	507	493	486	522
75°	281	274	267	262	260	298
85°	74	74	71	71	70	79
90°	1	5	8	10	11	6
95°	19	7	8	10	10	24
105°	106	108	110	113	100	111
115°	198	199	199	200	200	195
125°	278	280	279	280	280	249
135°	345	345	346	347	348	266
145°	398	399	399	400	400	249
155°	437	437	436	437	436	201
165°	461	459	459	462	458	130
175°	471	469	469	473	468	45
180°	471	471	471	471	471	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1700.2	1700.2	1700.2	1700.2	1700.2
2.5°	1705.7	1701.6	1686.6	1700.2	1698.9
5°	1698.9	1693.4	1678.4	1693.4	1690.7
7.5°	1686.6	1681.2	1664.8	1677.1	1675.7
10°	1668.9	1663.5	1645.7	1656.6	1653.9
12.5°	1645.7	1640.3	1621.2	1633.5	1629.4
15°	1617.1	1611.7	1591.3	1599.4	1595.3
17.5°	1584.4	1577.6	1558.6	1564.0	1561.3
20°	1547.7	1540.8	1520.4	1524.5	1521.8
22.5°	1508.1	1498.6	1478.2	1486.3	1480.9
25°	1464.6	1455.0	1435.9	1437.3	1431.9
27.5°	1415.5	1406.0	1388.3	1385.5	1378.7
30°	1366.5	1355.6	1337.8	1332.4	1325.6
32.5°	1314.7	1305.2	1286.1	1279.3	1272.5
35°	1260.2	1250.7	1231.6	1222.0	1215.2
37.5°	1203.0	1194.8	1174.4	1164.8	1155.3
40°	1147.1	1136.2	1115.8	1102.2	1095.3
42.5°	1087.2	1081.7	1058.6	1042.2	1038.1
45°	1028.6	1019.1	997.3	982.3	978.2
47.5°	967.3	960.5	940.0	923.7	912.8
50°	904.6	899.2	880.1	861.0	852.8
52.5°	843.3	836.5	816.1	799.7	788.8
55°	777.9	773.8	754.8	738.4	730.2
57.5°	716.6	712.5	693.4	677.1	668.9
60°	652.6	645.8	628.1	615.8	609.0
62.5°	589.9	584.5	565.4	554.5	547.7
65°	527.2	520.4	506.8	493.2	486.4
67.5°	463.2	457.8	444.1	430.5	429.1
70°	404.6	395.1	384.2	373.3	369.2
72.5°	342.0	332.4	324.2	316.1	312.0
75°	280.6	273.8	267.0	261.6	260.2
77.5°	220.7	218.0	211.2	209.8	205.7
80°	167.6	163.5	160.8	158.0	156.7
82.5°	115.8	114.4	114.4	113.1	111.7
85°	73.6	73.6	70.8	70.8	69.5
87.5°	35.4	34.1	32.7	32.7	32.7
90°	1.1	4.9	7.8	9.9	10.6
92.5°	5.3	4.6	7.4	9.5	9.5
95°	19.4	7.4	7.8	9.9	10.2
97.5°	37.0	44.8	7.8	9.5	9.9
100°	57.8	64.1	15.5	9.5	9.9
102.5°	81.1	85.3	89.5	10.2	10.2
105°	106.1	108.2	110.0	113.1	100.4
107.5°	129.0	130.0	132.5	134.3	135.7
110°	152.2	153.3	155.4	156.1	157.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	174.8	176.9	177.6	177.3	178.7
115°	198.1	199.1	198.8	199.5	199.5
117.5°	218.9	220.3	221.3	221.0	221.0
120°	240.0	241.4	241.1	241.8	241.1
122.5°	259.7	260.4	261.1	261.5	260.8
125°	278.4	279.8	279.1	280.2	280.5
127.5°	296.4	296.7	298.5	298.1	297.8
130°	313.7	314.0	315.1	315.4	315.4
132.5°	329.5	330.2	331.6	332.0	331.6
135°	345.4	345.0	346.4	347.1	347.8
137.5°	359.5	359.5	361.2	361.9	361.6
140°	373.2	373.9	374.6	375.7	376.0
142.5°	385.6	387.0	387.3	388.0	388.0
145°	398.2	399.3	399.3	399.6	400.4
147.5°	408.1	410.2	409.9	410.2	410.6
150°	419.0	420.4	420.1	420.1	420.4
152.5°	428.2	429.3	428.5	429.3	428.9
155°	436.7	437.0	435.9	437.4	436.3
157.5°	444.1	444.1	442.6	444.4	442.6
160°	450.4	449.3	449.0	451.1	449.0
162.5°	456.0	454.6	454.3	456.4	453.9
165°	460.6	458.9	458.9	461.7	458.5
167.5°	464.5	462.7	462.4	465.6	462.0
170°	467.7	465.6	465.9	468.7	465.2
172.5°	469.8	467.7	468.0	470.8	467.0
175°	471.2	469.1	469.4	472.6	468.4
177.5°	472.2	469.8	470.5	473.3	469.1
180°	471.2	471.2	471.2	471.2	471.2

(END OF REPORT)