

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: P1000644

Luminaire Tested: SA4XXDIP-B1020D365UB2750-4F0-XX-W2A-D_3500K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1000644
REPORT IS A COMBINATION OF REPORTS P995255 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA4XXDIP-B1020D365UB2750-4F0-XX-W2A-D_3500K
Description: Define 4 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

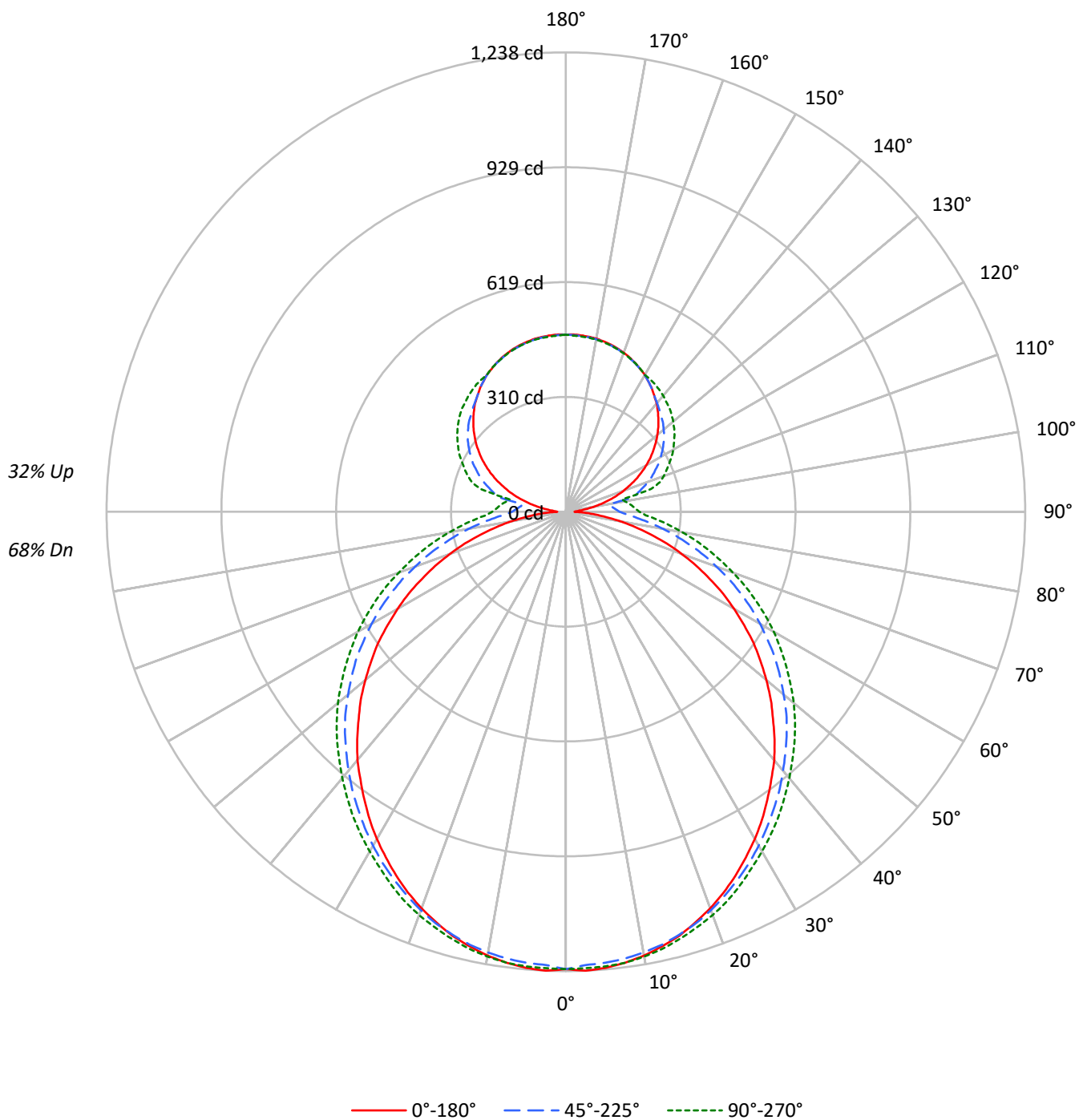
Lumens per Lamp: N/A
Luminaire Lumens: 5680.0 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
Input Voltage (V):
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	112	112	112	112	105	105	105	105	94	94	94	83	83	83	73	73	73
1	101	95	91	87	95	90	86	83	80	77	74	71	69	66	62	61	59
2	91	83	76	70	85	78	72	67	69	65	60	61	58	54	54	51	49
3	83	72	64	58	78	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	71	60	52	46	54	47	42	48	43	38	42	38	35
5	69	57	48	41	65	54	46	40	48	41	36	43	37	33	38	33	30
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	34	30	26
7	59	46	37	31	55	43	36	30	39	33	28	35	30	25	31	27	23
8	55	42	33	28	51	40	32	27	36	29	25	32	27	23	29	24	21
9	51	38	30	25	48	36	29	24	33	26	22	29	24	20	26	22	19
10	48	35	27	22	45	33	26	21	30	24	20	27	22	18	24	20	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10050	10050	10050
5°	10078	9788	9806
10°	10012	9595	9568
15°	9919	9379	9300
20°	9779	9145	9040
25°	9623	8887	8759
30°	9454	8630	8472
35°	9263	8368	8217
40°	9108	8117	7953
45°	8881	7881	7720
50°	8689	7613	7474
55°	8487	7355	7190
60°	8177	7033	6923
65°	7834	6686	6602
70°	7420	6291	6231
75°	6841	5850	5877
80°	6186	5403	5507
85°	5319	4951	5207

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 8881 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	2.1
10°-20°	334.6	5.9
20°-30°	505.9	8.9
30°-40°	612.0	10.8
40°-50°	647.0	11.4
50°-60°	608.9	10.7
60°-70°	505.3	8.9
70°-80°	354.6	6.2
80°-90°	200.9	3.5
90°-100°	134.9	2.4
100°-110°	192.5	3.4
110°-120°	258.4	4.5
120°-130°	286.2	5.0
130°-140°	285.0	5.0
140°-150°	255.9	4.5
150°-160°	204.1	3.6
160°-170°	131.6	2.3
170°-180°	45.4	0.8
0°-30°	957.3	16.9
0°-40°	1569.3	27.6
0°-60°	2825.3	49.7
0°-90°	3886.1	68.4
90°-120°	585.8	10.3
90°-150°	1412.9	24.9
90°-180°	1794.0	31.6
0°-180°	5680.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1232	1232	1232	1232	1232	
5°	1234	1230	1220	1231	1230	117
15°	1183	1184	1180	1192	1191	333
25°	1082	1090	1094	1110	1111	498
35°	947	963	977	996	1001	593
45°	789	816	842	865	872	610
55°	618	647	689	716	725	551
65°	428	472	519	553	564	424
75°	237	288	346	385	398	252
85°	73	131	193	235	248	76
90°	23	82	144	187	198	16
95°	38	71	128	167	180	39
105°	120	150	202	240	238	127
115°	209	222	266	297	307	206
125°	288	288	321	349	357	257
135°	353	352	363	386	395	272
145°	405	404	404	413	419	253
155°	442	443	442	443	442	204
165°	467	465	465	468	464	132
175°	477	475	476	479	474	45
180°	477	477	477	477	477	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1232.5	1232.5	1232.5	1232.5	1232.5
2.5°	1238.0	1233.9	1222.8	1232.5	1231.1
5°	1233.9	1229.7	1220.0	1231.1	1229.7
7.5°	1225.6	1222.8	1214.5	1227.0	1225.6
10°	1214.5	1213.1	1206.2	1218.7	1217.3
12.5°	1199.3	1199.3	1195.2	1206.2	1206.2
15°	1182.8	1184.2	1180.0	1192.4	1191.1
17.5°	1160.7	1164.8	1163.5	1175.9	1174.5
20°	1137.2	1141.4	1142.8	1156.6	1156.6
22.5°	1111.0	1116.5	1119.3	1133.1	1135.9
25°	1082.0	1090.3	1094.5	1109.6	1111.0
27.5°	1050.3	1062.7	1068.2	1082.0	1083.4
30°	1018.5	1029.6	1039.3	1054.4	1057.2
32.5°	984.0	997.8	1008.9	1026.8	1029.6
35°	946.8	963.3	977.1	996.5	1000.6
37.5°	909.5	928.8	945.4	964.7	968.9
40°	873.6	891.6	910.9	931.6	937.1
42.5°	832.2	852.9	876.4	899.9	904.0
45°	789.4	815.7	841.9	865.4	872.3
47.5°	749.4	775.6	806.0	829.5	837.7
50°	705.3	735.6	766.0	793.6	801.9
52.5°	661.1	691.5	727.3	754.9	763.2
55°	618.3	647.3	688.7	716.3	724.6
57.5°	570.0	605.9	645.9	679.0	685.9
60°	523.1	559.0	604.5	636.2	647.3
62.5°	477.5	517.6	563.1	594.8	605.9
65°	427.8	472.0	518.9	553.4	564.5
67.5°	380.9	427.8	477.5	512.0	523.1
70°	332.6	379.5	432.0	469.2	478.9
72.5°	285.7	334.0	390.6	426.5	437.5
75°	237.4	288.5	346.4	385.1	397.5
77.5°	191.8	245.7	306.4	345.0	358.8
80°	150.4	205.6	266.4	307.8	318.8
82.5°	109.0	167.0	227.7	270.5	282.9
85°	73.1	131.1	193.2	234.6	248.4
87.5°	45.5	102.1	162.9	202.9	215.3
90°	23.2	82.3	144.5	186.7	198.4
92.5°	26.1	73.6	135.9	176.6	187.6
95°	37.5	71.0	128.0	167.3	180.2
97.5°	54.1	101.9	121.1	158.7	171.5
100°	73.8	116.1	120.6	151.8	161.8
102.5°	97.3	131.9	188.7	144.3	155.3
105°	119.9	149.6	202.5	240.2	238.3
107.5°	143.1	167.6	218.4	254.7	265.8
110°	165.2	185.7	236.1	268.6	280.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	186.8	205.4	251.7	281.7	294.2
115°	208.9	222.4	266.3	297.3	307.0
117.5°	230.0	239.7	282.2	310.7	321.8
120°	250.0	255.6	295.3	323.6	333.9
122.5°	270.0	270.7	308.7	336.7	345.6
125°	287.5	287.6	321.4	348.7	357.3
127.5°	305.7	304.7	334.1	358.6	367.9
130°	321.8	320.9	344.0	369.2	377.5
132.5°	337.9	337.3	355.2	379.1	387.0
135°	352.7	352.3	363.3	386.2	395.2
137.5°	367.0	365.6	372.8	394.3	400.8
140°	380.9	380.2	382.3	401.3	408.5
142.5°	392.0	393.4	392.4	408.3	413.8
145°	404.8	404.5	404.5	413.2	419.4
147.5°	414.8	415.6	415.2	417.0	422.8
150°	425.9	425.9	425.6	425.6	425.9
152.5°	433.8	434.8	434.1	434.8	434.5
155°	442.3	442.7	441.6	443.1	442.0
157.5°	449.8	449.8	448.4	450.2	448.4
160°	456.3	455.2	454.8	457.0	454.8
162.5°	462.0	460.5	460.2	462.3	459.8
165°	466.6	464.8	464.8	467.7	464.5
167.5°	470.5	468.8	468.4	471.6	468.0
170°	473.8	471.6	472.0	474.8	471.3
172.5°	475.9	473.8	474.1	477.0	473.0
175°	477.3	475.2	475.5	478.8	474.5
177.5°	478.4	475.9	476.6	479.5	475.2
180°	477.3	477.3	477.3	477.3	477.3

(END OF REPORT)