

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: P999498

Luminaire Tested: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999498
REPORT IS A COMBINATION OF REPORTS P988051 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4
Description: Define 2 Regressed Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

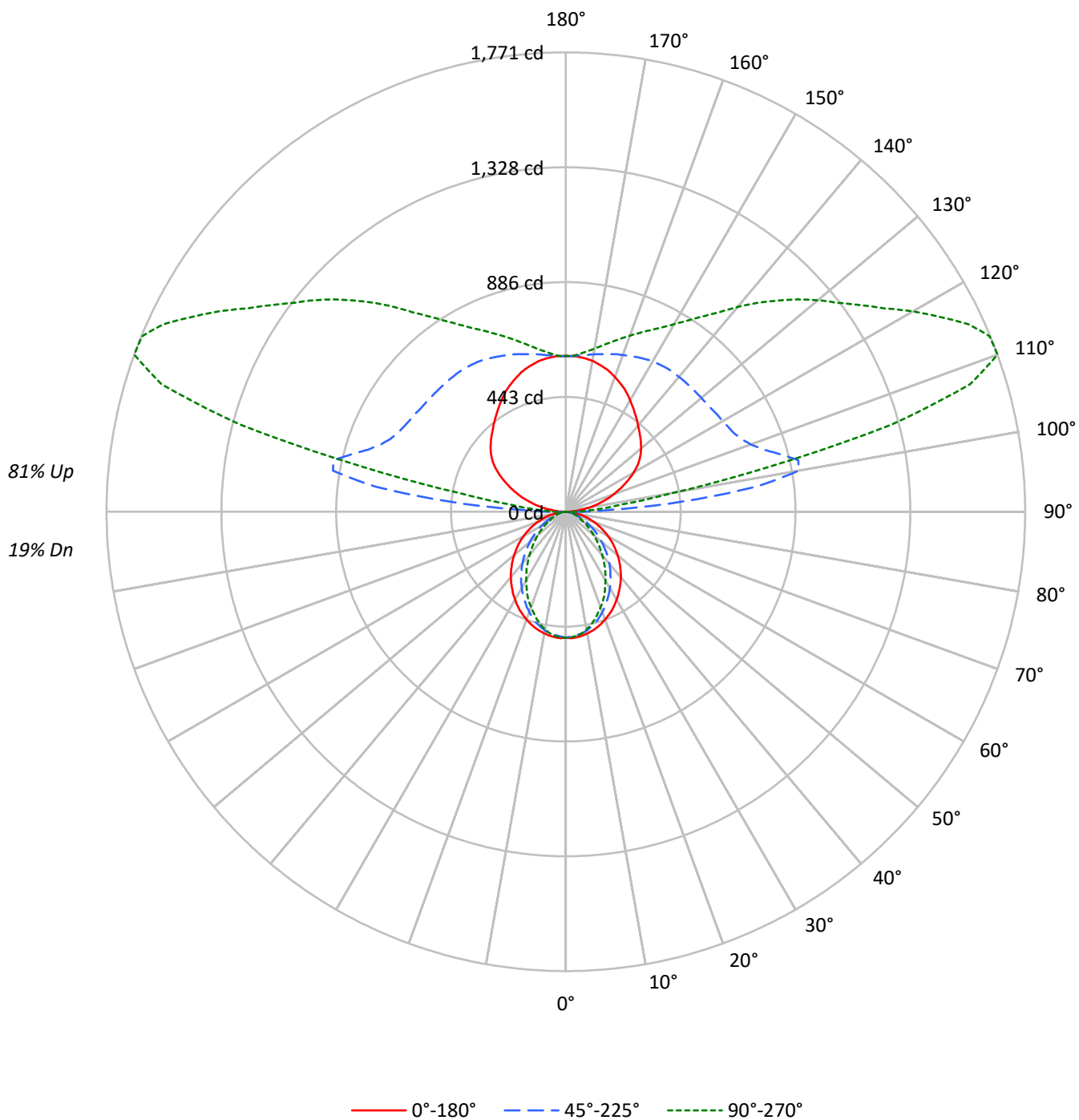
Lumens per Lamp: N/A
Luminaire Lumens: 5187.8 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 48
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

TEST NUMBER: P999498

CATALOG NUMBER: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4

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	100	100	100	100	88	88	88	88	66	66	66	46	46	46	28	28	28
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	25	24	24
2	83	76	70	66	73	67	63	59	51	48	45	36	34	33	22	21	20
3	76	67	60	55	67	59	54	49	45	41	38	32	30	28	20	19	18
4	69	59	52	46	61	53	46	42	40	36	33	29	26	24	18	16	15
5	64	53	45	39	56	47	40	36	36	31	28	26	23	21	16	15	13
6	58	47	40	34	51	42	36	31	32	28	24	23	20	18	15	13	12
7	54	42	35	30	47	38	31	27	29	25	21	21	18	16	13	12	10
8	50	38	31	26	44	34	28	24	26	22	19	19	16	14	12	11	9
9	46	35	28	23	41	31	25	21	24	20	17	18	15	13	11	10	8
10	43	32	25	21	38	28	23	19	22	18	15	16	13	11	10	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7688	7688	7688
5°	7701	7315	7261
10°	7625	6937	6709
15°	7521	6492	6080
20°	7382	5987	5422
25°	7241	5467	4820
30°	7049	4961	4163
35°	6862	4450	3598
40°	6673	3950	3016
45°	6452	3432	2509
50°	6222	2934	2043
55°	5985	2435	1621
60°	5708	1947	1226
65°	5393	1485	997
70°	5006	1077	793
75°	4526	822	607
80°	3824	556	406
85°	2670	256	198

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6452 cd/sqm

TEST NUMBER: P999498

CATALOG NUMBER: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.5	0.9
10°-20°	125.0	2.4
20°-30°	175.5	3.4
30°-40°	191.3	3.7
40°-50°	175.8	3.4
50°-60°	138.0	2.7
60°-70°	89.9	1.7
70°-80°	46.3	0.9
80°-90°	15.6	0.3
90°-100°	243.3	4.7
100°-110°	822.6	15.9
110°-120°	864.7	16.7
120°-130°	711.0	13.7
130°-140°	571.4	11.0
140°-150°	431.6	8.3
150°-160°	303.4	5.8
160°-170°	178.7	3.4
170°-180°	58.1	1.1
0°-30°	346.0	6.7
0°-40°	537.2	10.4
0°-60°	851.1	16.4
0°-90°	1002.8	19.3
90°-120°	1930.6	37.2
90°-150°	3644.7	70.3
90°-180°	4185.0	80.7
0°-180°	5187.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	486	486	486	486	486	
5°	486	484	478	482	480	46
15°	462	457	442	434	430	130
25°	419	405	376	358	352	193
35°	361	339	300	272	263	226
45°	295	266	220	189	178	228
55°	225	190	143	116	108	201
65°	152	116	76	62	60	150
75°	81	50	35	32	32	86
85°	19	10	8	8	8	22
90°	1	16	39	38	38	4
95°	40	99	452	171	132	42
105°	141	212	855	1529	1301	150
115°	248	313	716	1477	1712	246
125°	346	410	688	1196	1389	308
135°	406	485	680	1005	1151	314
145°	464	533	676	840	919	291
155°	528	570	657	743	772	243
165°	575	592	629	667	678	162
175°	599	600	605	612	611	57
180°	600	600	600	600	600	

TEST NUMBER: P999498

CATALOG NUMBER: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	485.7	485.7	485.7	485.7	485.7
2.5°	487.9	485.7	480.9	485.3	484.4
5°	485.7	483.5	477.8	481.8	480.5
7.5°	481.8	479.2	473.0	474.8	472.6
10°	476.5	473.4	464.6	463.3	460.7
12.5°	469.9	466.0	454.1	451.5	446.6
15°	462.0	457.2	442.2	433.9	429.5
17.5°	452.8	445.7	427.3	417.6	410.6
20°	442.2	433.4	411.5	400.5	390.8
22.5°	430.8	420.7	395.2	380.2	373.7
25°	419.4	405.3	376.3	358.3	351.7
27.5°	405.7	390.8	358.7	338.0	327.9
30°	391.2	374.5	339.4	316.9	305.1
32.5°	377.2	356.9	320.9	294.5	283.5
35°	361.3	338.9	300.2	272.5	262.9
37.5°	346.0	321.8	280.9	250.6	239.6
40°	329.7	303.3	260.7	229.5	218.0
42.5°	313.0	284.9	240.5	207.9	196.9
45°	295.4	266.0	219.8	188.6	178.0
47.5°	278.7	247.5	200.0	168.8	159.1
50°	260.2	229.0	180.7	150.3	141.1
52.5°	242.2	209.2	162.2	133.2	124.8
55°	224.6	190.3	142.9	116.5	108.1
57.5°	206.6	171.4	125.7	101.1	94.1
60°	188.1	153.0	107.7	85.3	78.2
62.5°	170.1	135.0	92.3	71.2	67.7
65°	151.7	116.1	76.5	61.5	60.2
67.5°	134.1	98.5	61.5	54.1	52.8
70°	115.6	81.3	51.0	46.6	44.8
72.5°	98.0	65.5	42.6	39.1	38.2
75°	80.9	50.1	35.2	32.1	31.7
77.5°	63.7	35.6	27.7	25.9	25.1
80°	47.9	25.5	21.1	19.3	19.3
82.5°	33.4	17.1	14.5	13.6	13.6
85°	18.9	9.7	8.4	8.4	8.4
87.5°	7.0	3.5	3.5	3.1	3.1
90°	1.2	15.6	39.2	37.5	38.1
92.5°	17.3	54.8	177.8	81.9	70.4
95°	40.4	99.2	452.5	170.8	131.6
97.5°	60.0	131.0	737.6	342.8	220.5
100°	88.9	160.4	911.9	682.8	413.2
102.5°	115.4	187.0	917.7	1154.4	805.7
105°	140.8	212.4	855.4	1528.9	1300.9
107.5°	168.5	237.8	797.6	1664.5	1634.5
110°	196.2	263.8	758.4	1642.6	1770.7

TEST NUMBER: P999498

CATALOG NUMBER: SA2XXRDIP-B290D1080UB40-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	221.6	288.6	733.0	1568.2	1768.4
115°	248.2	313.4	715.7	1477.0	1711.9
117.5°	275.9	338.2	706.4	1389.8	1626.4
120°	301.3	362.5	698.4	1311.9	1544.5
122.5°	325.5	387.2	693.7	1251.3	1459.1
125°	346.3	409.8	688.0	1196.4	1388.7
127.5°	363.6	431.2	684.5	1149.7	1322.9
130°	378.6	450.2	682.2	1102.4	1268.6
132.5°	392.5	468.6	681.1	1053.3	1212.0
135°	406.3	484.8	679.9	1005.4	1150.9
137.5°	419.0	498.7	679.9	957.0	1092.0
140°	434.0	511.4	678.7	914.2	1030.8
142.5°	449.0	521.8	678.7	873.2	969.6
145°	464.0	533.3	676.4	839.8	918.8
147.5°	480.2	542.6	673.0	810.3	873.8
150°	496.4	551.8	669.5	785.0	834.6
152.5°	512.5	561.0	663.7	763.6	801.1
155°	527.5	569.6	656.8	742.8	772.2
157.5°	540.2	576.6	649.9	723.2	746.8
160°	552.9	583.6	643.0	703.6	722.6
162.5°	565.6	588.7	637.2	685.1	699.5
165°	574.9	592.2	629.1	667.2	677.6
167.5°	582.9	595.6	622.2	651.0	656.8
170°	591.0	597.4	616.4	636.0	638.3
172.5°	595.6	599.0	609.5	622.8	623.3
175°	599.1	599.7	604.9	612.3	610.6
177.5°	601.4	600.2	600.2	604.9	601.4
180°	600.2	600.2	600.2	600.2	600.2

(END OF REPORT)