

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: P999504

Luminaire Tested: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999504
REPORT IS A COMBINATION OF REPORTS P988057 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4
Description: Define 2 Regressed Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015}
{m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

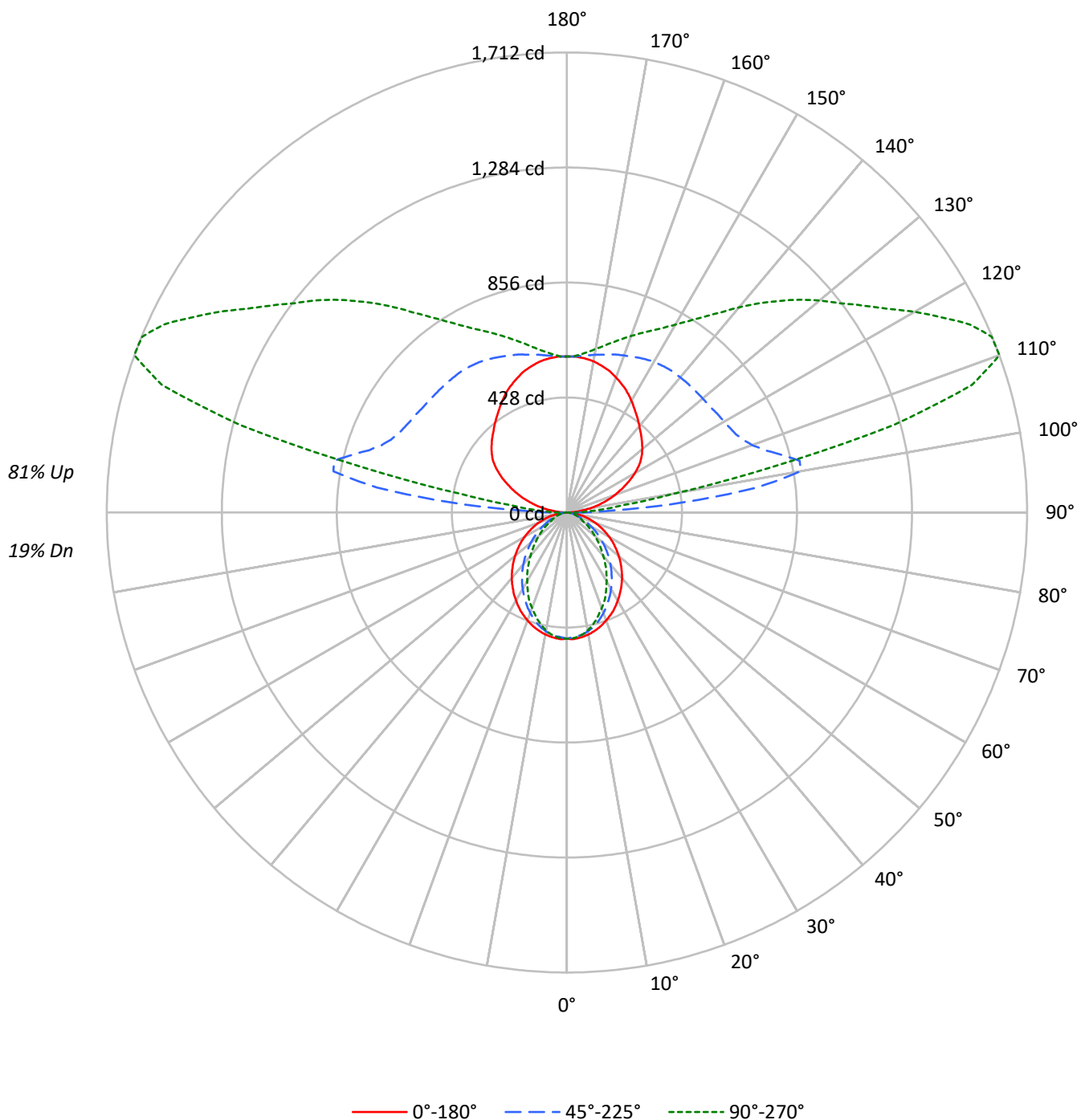
Lumens per Lamp: N/A
Luminaire Lumens: 5016.6 lumens
Efficiency: N/A
Efficacy: 104.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P999504

CATALOG NUMBER: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P999504

CATALOG NUMBER: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

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°	7435	7435	7435
5°	7447	7073	7021
10°	7374	6709	6488
15°	7272	6278	5879
20°	7138	5789	5243
25°	7001	5287	4661
30°	6816	4798	4025
35°	6636	4303	3479
40°	6452	3820	2916
45°	6238	3318	2427
50°	6017	2836	1975
55°	5788	2354	1569
60°	5520	1882	1187
65°	5212	1436	964
70°	4842	1041	768
75°	4375	794	586
80°	3696	538	393
85°	2585	247	190

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6238 cd/sqm

TEST NUMBER: P999504

CATALOG NUMBER: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.0	0.9
10°-20°	120.8	2.4
20°-30°	169.7	3.4
30°-40°	184.9	3.7
40°-50°	170.0	3.4
50°-60°	133.5	2.7
60°-70°	86.9	1.7
70°-80°	44.7	0.9
80°-90°	15.1	0.3
90°-100°	235.3	4.7
100°-110°	795.5	15.9
110°-120°	836.1	16.7
120°-130°	687.6	13.7
130°-140°	552.5	11.0
140°-150°	417.4	8.3
150°-160°	293.4	5.8
160°-170°	172.8	3.4
170°-180°	56.2	1.1
0°-30°	334.5	6.7
0°-40°	519.5	10.4
0°-60°	823.0	16.4
0°-90°	969.7	19.3
90°-120°	1866.9	37.2
90°-150°	3524.5	70.3
90°-180°	4047.0	80.7
0°-180°	5016.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	470	468	462	466	465	45
15°	447	442	428	420	415	126
25°	406	392	364	346	340	186
35°	349	328	290	264	254	219
45°	286	257	212	182	172	221
55°	217	184	138	113	105	194
65°	147	112	74	60	58	145
75°	78	48	34	31	31	83
85°	18	9	8	8	8	21
90°	1	15	38	36	37	4
95°	39	96	438	165	127	40
105°	136	205	827	1478	1258	145
115°	240	303	692	1428	1655	238
125°	335	396	665	1157	1343	298
135°	393	469	658	972	1113	304
145°	449	516	654	812	888	282
155°	510	551	635	718	747	235
165°	556	573	608	645	655	157
175°	579	580	585	592	590	55
180°	580	580	580	580	580	

TEST NUMBER: P999504

CATALOG NUMBER: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.7	469.7	469.7	469.7	469.7
2.5°	471.8	469.7	465.0	469.3	468.4
5°	469.7	467.6	462.0	465.9	464.6
7.5°	465.9	463.3	457.4	459.1	456.9
10°	460.8	457.8	449.3	448.0	445.5
12.5°	454.4	450.6	439.1	436.5	431.9
15°	446.7	442.1	427.6	419.5	415.3
17.5°	437.8	431.0	413.2	403.8	397.0
20°	427.6	419.1	397.9	387.2	377.9
22.5°	416.6	406.8	382.1	367.7	361.3
25°	405.5	391.9	363.9	346.4	340.1
27.5°	392.3	377.9	346.9	326.9	317.1
30°	378.3	362.2	328.2	306.5	295.0
32.5°	364.7	345.2	310.3	284.8	274.2
35°	349.4	327.7	290.3	263.5	254.2
37.5°	334.5	311.2	271.6	242.3	231.7
40°	318.8	293.3	252.1	221.9	210.8
42.5°	302.6	275.4	232.5	201.1	190.4
45°	285.6	257.2	212.5	182.4	172.2
47.5°	269.5	239.3	193.4	163.2	153.9
50°	251.6	221.5	174.7	145.4	136.4
52.5°	234.2	202.3	156.9	128.8	120.7
55°	217.2	184.1	138.1	112.6	104.6
57.5°	199.8	165.8	121.6	97.8	91.0
60°	181.9	147.9	104.1	82.5	75.7
62.5°	164.5	130.5	89.3	68.9	65.5
65°	146.6	112.2	74.0	59.5	58.2
67.5°	129.6	95.2	59.5	52.3	51.0
70°	111.8	78.6	49.3	45.1	43.4
72.5°	94.8	63.3	41.2	37.8	37.0
75°	78.2	48.5	34.0	31.0	30.6
77.5°	61.6	34.4	26.8	25.1	24.2
80°	46.3	24.7	20.4	18.7	18.7
82.5°	32.3	16.6	14.0	13.2	13.2
85°	18.3	9.4	8.1	8.1	8.1
87.5°	6.8	3.4	3.4	3.0	3.0
90°	1.1	15.0	38.0	36.2	36.8
92.5°	16.7	53.0	171.9	79.2	68.1
95°	39.1	96.0	437.6	165.2	127.3
97.5°	58.0	126.7	713.3	331.5	213.2
100°	86.0	155.2	881.8	660.2	399.6
102.5°	111.6	180.8	887.4	1116.2	779.1
105°	136.2	205.4	827.1	1478.5	1258.0
107.5°	163.0	230.0	771.3	1609.6	1580.6
110°	189.8	255.0	733.4	1588.4	1712.3

TEST NUMBER: P999504

CATALOG NUMBER: SA2XXRDIP-B290D1080UB50-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	214.3	279.0	708.8	1516.4	1710.1
115°	240.0	303.0	692.1	1428.2	1655.4
117.5°	266.8	327.0	683.1	1344.0	1572.8
120°	291.3	350.5	675.3	1268.6	1493.5
122.5°	314.8	374.5	670.9	1210.1	1410.9
125°	334.9	396.2	665.3	1157.0	1342.8
127.5°	351.6	416.9	661.9	1111.8	1279.2
130°	366.1	435.4	659.7	1066.1	1226.8
132.5°	379.5	453.2	658.6	1018.6	1172.1
135°	392.9	468.8	657.5	972.2	1112.9
137.5°	405.2	482.2	657.5	925.4	1056.0
140°	419.7	494.5	656.4	884.0	996.8
142.5°	434.2	504.6	656.4	844.4	937.7
145°	448.7	515.7	654.1	812.1	888.5
147.5°	464.4	524.6	650.8	783.6	845.0
150°	480.0	533.6	647.4	759.0	807.0
152.5°	495.6	542.5	641.8	738.4	774.7
155°	510.1	550.8	635.1	718.3	746.8
157.5°	522.4	557.6	628.4	699.3	722.2
160°	534.7	564.2	621.8	680.3	698.8
162.5°	547.0	569.3	616.2	662.5	676.4
165°	555.9	572.6	608.4	645.2	655.2
167.5°	563.7	576.0	601.7	629.6	635.1
170°	571.5	577.6	596.1	615.0	617.3
172.5°	576.0	579.4	589.4	602.2	602.8
175°	579.3	579.9	584.9	592.2	590.5
177.5°	581.6	580.5	580.5	584.9	581.6
180°	580.5	580.5	580.5	580.5	580.5

(END OF REPORT)