

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: P998266

Luminaire Tested: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998266
REPORT IS A COMBINATION OF REPORTS P984006 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

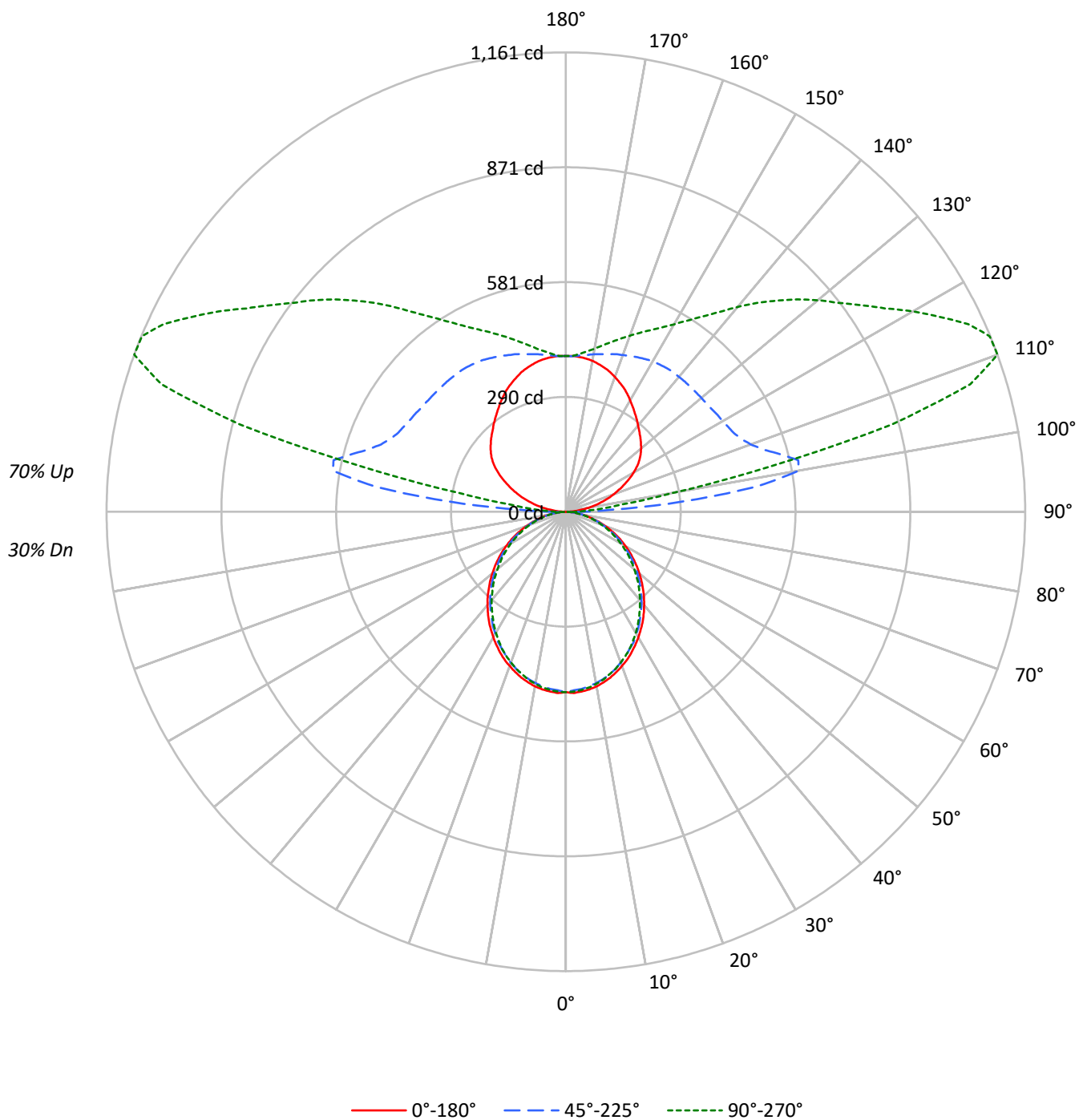
Lumens per Lamp: N/A
Luminaire Lumens: 3906.1 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 34.1
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

TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

Luminous Intensity Polar Plot



TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	32
2	85	78	72	67	76	70	65	61	55	52	49	42	39	37	29	28	27
3	77	68	61	56	69	61	55	51	49	44	41	37	34	32	26	24	23
4	71	60	53	47	63	54	48	43	43	38	35	33	30	27	23	21	19
5	65	54	46	40	58	48	42	37	38	34	30	29	26	23	21	19	17
6	60	48	40	34	53	43	37	32	35	30	26	26	23	20	19	17	15
7	55	43	35	30	49	39	32	28	31	26	23	24	21	18	17	15	13
8	51	39	32	26	46	35	29	24	28	24	20	22	18	16	16	13	12
9	47	36	28	23	42	32	26	22	26	21	18	20	17	14	14	12	11
10	44	32	25	21	40	29	23	19	24	19	16	18	15	13	13	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7217	7217	7217
5°	7228	6880	6831
10°	7171	6566	6435
15°	7065	6250	6021
20°	6923	5907	5626
25°	6781	5548	5234
30°	6604	5210	4822
35°	6436	4855	4417
40°	6230	4503	4033
45°	6023	4155	3658
50°	5797	3801	3269
55°	5561	3422	2899
60°	5295	3012	2517
65°	5002	2595	2113
70°	4634	2139	1707
75°	4123	1649	1317
80°	3497	1120	847
85°	2543	521	360

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6023 cd/sqm

TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.9	1.1
10°-20°	120.7	3.1
20°-30°	177.4	4.5
30°-40°	206.1	5.3
40°-50°	205.8	5.3
50°-60°	179.5	4.6
60°-70°	132.7	3.4
70°-80°	75.1	1.9
80°-90°	22.3	0.6
90°-100°	159.5	4.1
100°-110°	539.3	13.8
110°-120°	566.9	14.5
120°-130°	466.2	11.9
130°-140°	374.6	9.6
140°-150°	283.0	7.2
150°-160°	198.9	5.1
160°-170°	117.1	3.0
170°-180°	38.1	1.0
0°-30°	341.1	8.7
0°-40°	547.2	14.0
0°-60°	932.5	23.9
0°-90°	1162.5	29.8
90°-120°	1265.7	32.4
90°-150°	2389.4	61.2
90°-180°	2744.0	70.2
0°-180°	3906.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	456	456	456	456	456	
5°	456	454	449	453	452	43
15°	434	431	426	427	425	122
25°	393	389	382	383	382	181
35°	339	334	328	325	323	212
45°	276	273	266	261	260	213
55°	209	206	201	196	193	187
65°	141	138	134	130	128	139
75°	74	73	71	68	69	79
85°	18	18	17	16	15	20
90°	1	10	26	25	25	3
95°	26	65	297	112	86	27
105°	92	139	561	1002	853	98
115°	163	205	469	968	1122	161
125°	227	269	451	784	910	202
135°	266	318	446	659	754	206
145°	304	350	444	551	602	191
155°	346	374	431	487	506	159
165°	377	388	412	437	444	106
175°	393	393	396	402	400	37
180°	394	394	394	394	394	

TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	455.9	455.9	455.9	455.9	455.9
2.5°	458.6	456.4	451.6	455.9	455.1
5°	455.9	454.2	449.4	452.9	452.0
7.5°	452.9	450.2	445.4	448.9	448.1
10°	448.1	445.0	439.7	443.2	441.9
12.5°	441.5	438.8	433.6	435.8	434.9
15°	434.0	431.4	425.7	427.4	425.3
17.5°	424.8	422.2	416.5	418.7	416.5
20°	414.7	412.1	406.0	407.3	405.5
22.5°	404.7	400.7	395.0	395.0	394.1
25°	392.8	389.3	381.9	382.7	381.9
27.5°	379.7	376.6	370.9	369.6	367.4
30°	366.5	363.0	356.4	355.1	353.4
32.5°	352.5	349.9	342.8	340.2	338.5
35°	338.9	334.5	327.5	324.9	322.7
37.5°	323.5	319.6	312.6	309.5	307.3
40°	307.8	304.3	297.2	293.3	291.5
42.5°	292.4	288.9	281.9	277.5	274.9
45°	275.8	272.7	266.1	261.3	259.5
47.5°	259.5	256.5	249.5	244.6	242.0
50°	242.4	240.2	234.1	228.0	225.8
52.5°	225.8	222.7	217.0	212.2	209.1
55°	208.7	206.1	200.8	195.5	193.3
57.5°	191.6	189.4	183.7	178.4	176.7
60°	174.5	172.7	166.6	161.8	160.5
62.5°	157.8	154.8	150.4	146.0	144.2
65°	140.7	138.1	133.7	129.8	127.6
67.5°	123.2	121.0	117.1	114.0	112.2
70°	107.0	105.2	101.3	98.2	96.5
72.5°	90.3	88.6	86.4	83.3	82.0
75°	73.7	72.8	70.6	68.0	68.8
77.5°	58.7	57.0	56.1	54.8	53.5
80°	43.8	43.4	42.5	41.2	40.3
82.5°	29.8	29.8	29.4	27.6	27.6
85°	18.0	17.5	17.1	15.8	15.3
87.5°	7.9	7.0	6.1	4.8	4.4
90°	0.8	10.2	25.7	24.6	25.0
92.5°	11.4	36.0	116.5	53.8	46.2
95°	26.5	65.1	296.7	112.0	86.3
97.5°	39.4	85.9	483.6	224.8	144.5
100°	58.3	105.2	597.8	447.6	270.9
102.5°	75.7	122.6	601.6	756.8	528.2
105°	92.3	139.2	560.8	1002.3	852.9
107.5°	110.5	155.9	522.9	1091.2	1071.6
110°	128.7	172.9	497.2	1076.9	1160.9

TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	145.3	189.2	480.5	1028.1	1159.4
115°	162.7	205.4	469.2	968.3	1122.3
117.5°	180.9	221.7	463.1	911.2	1066.3
120°	197.5	237.6	457.8	860.0	1012.6
122.5°	213.4	253.9	454.8	820.4	956.6
125°	227.0	268.6	451.0	784.4	910.4
127.5°	238.4	282.6	448.8	753.8	867.3
130°	248.2	295.1	447.2	722.7	831.7
132.5°	257.3	307.2	446.5	690.6	794.6
135°	266.4	317.8	445.7	659.2	754.5
137.5°	274.7	327.0	445.7	627.3	715.9
140°	284.5	335.2	445.0	599.4	675.8
142.5°	294.4	342.0	445.0	572.4	635.7
145°	304.2	349.6	443.5	550.6	602.4
147.5°	314.8	355.6	441.2	531.2	572.9
150°	325.4	361.7	438.9	514.6	547.1
152.5°	336.0	367.8	435.1	500.6	525.2
155°	345.8	373.5	430.6	487.0	506.3
157.5°	354.2	378.0	426.1	474.1	489.6
160°	362.5	382.5	421.5	461.2	473.7
162.5°	370.8	386.0	417.7	449.1	458.6
165°	376.9	388.2	412.4	437.4	444.2
167.5°	382.2	390.5	407.9	426.8	430.6
170°	387.5	391.6	404.1	417.0	418.5
172.5°	390.5	392.8	399.6	408.3	408.7
175°	392.8	393.2	396.5	401.5	400.3
177.5°	394.3	393.5	393.5	396.5	394.3
180°	393.5	393.5	393.5	393.5	393.5

TEST NUMBER: P998266

CATALOG NUMBER: SA2XXDIP-B290D725UB27-4F0-XX-W2A-F4

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	9.85	10.56	10.97	11.67	13.20	10.64	11.34	11.75	12.45	13.98
	3H	11.18	11.81	12.30	12.93	14.48	12.25	12.88	13.37	14.00	15.55
	4H	11.58	12.18	12.71	13.29	14.85	12.83	13.43	13.97	14.55	16.11
	6H	11.79	12.34	12.93	13.46	15.03	13.23	13.78	14.37	14.90	16.47
	8H	11.81	12.34	12.96	13.47	15.03	13.33	13.86	14.48	14.99	16.55
	12H	11.80	12.30	12.95	13.43	15.01	13.37	13.87	14.52	15.00	16.58
4H	2H	10.30	10.90	11.44	12.02	13.58	10.95	11.55	12.09	12.66	14.22
	3H	11.81	12.31	12.95	13.45	15.02	12.71	13.21	13.86	14.36	15.92
	4H	12.31	12.77	13.45	13.90	15.49	13.39	13.85	14.54	14.98	16.57
	6H	12.60	12.99	13.75	14.15	15.73	13.87	14.27	15.03	15.42	17.00
	8H	12.65	13.02	13.81	14.17	15.76	14.01	14.38	15.17	15.53	17.12
	12H	12.65	12.98	13.81	14.14	15.74	14.07	14.40	15.24	15.56	17.16
8H	4H	12.47	12.84	13.62	13.98	15.58	13.46	13.83	14.61	14.98	16.57
	6H	12.85	13.15	14.02	14.34	15.93	14.02	14.33	15.20	15.52	17.11
	8H	12.95	13.21	14.13	14.38	15.99	14.21	14.47	15.39	15.64	17.25
	12H	12.97	13.20	14.15	14.37	16.01	14.30	14.53	15.48	15.70	17.34
12H	4H	12.44	12.78	13.61	13.94	15.54	13.42	13.75	14.59	14.91	16.51
	6H	12.86	13.13	14.04	14.29	15.91	14.01	14.28	15.19	15.45	17.06
	8H	12.97	13.20	14.15	14.37	16.01	14.20	14.43	15.38	15.60	17.24

END OF REPORT