

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: P998374

Luminaire Tested: SA2XXDIP-B290D925UB50-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998374
REPORT IS A COMBINATION OF REPORTS P984114 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B290D925UB50-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

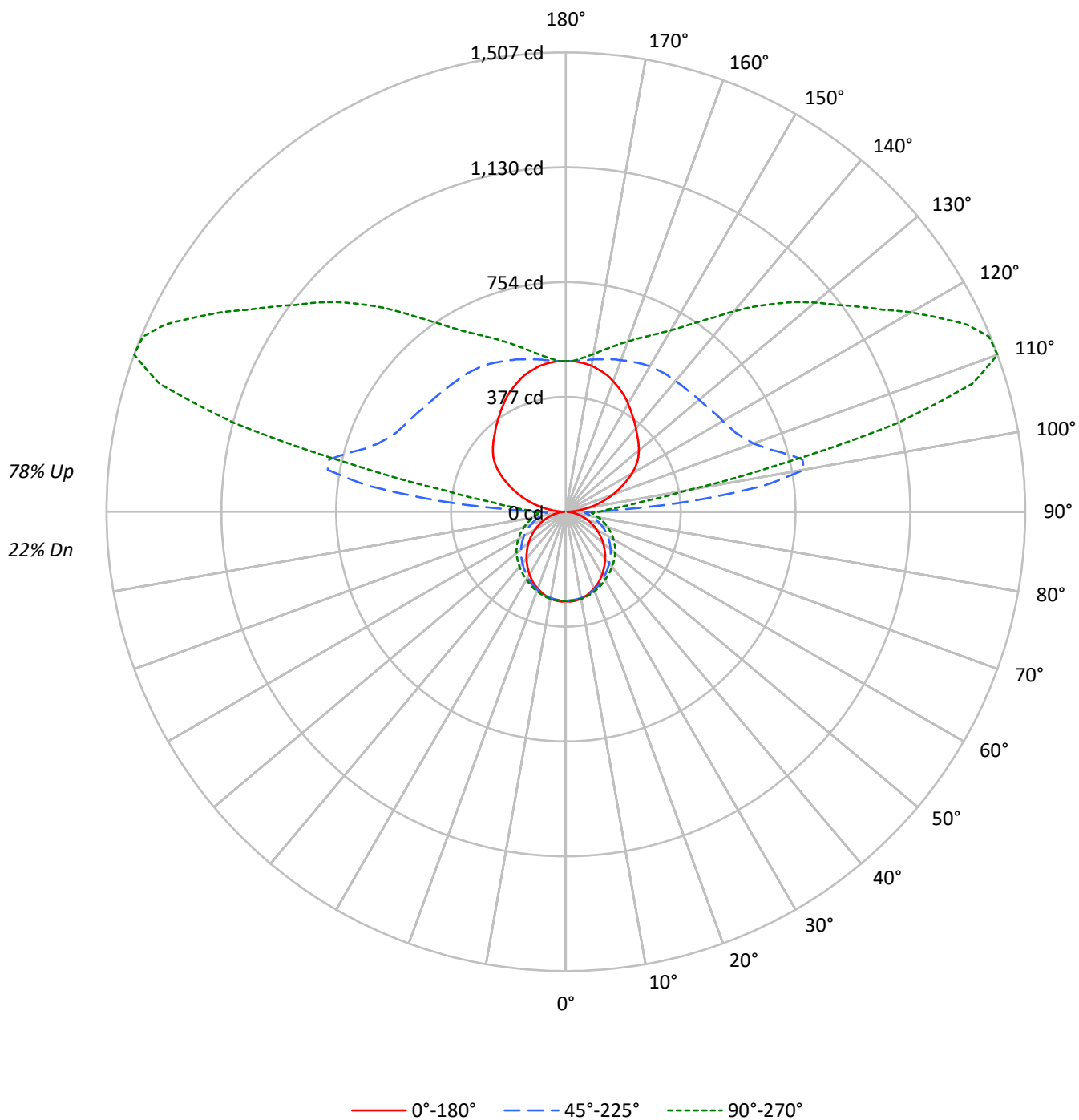
Lumens per Lamp: N/A
Luminaire Lumens: 4567.0 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 41.5
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30
1	91	86	82	79	80	77	73	70	58	56	54	41	40	39	26	25	24
2	82	75	69	64	73	66	61	57	51	47	44	36	34	32	22	21	20
3	75	66	58	53	66	58	52	47	44	40	37	31	29	26	19	18	17
4	68	58	50	44	60	51	45	40	39	35	31	28	25	22	17	15	14
5	62	51	43	37	55	45	39	34	35	30	26	25	22	19	15	14	12
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	13	11	9
8	49	37	29	24	43	33	27	22	25	21	17	18	15	13	11	10	8
9	45	34	26	21	40	30	24	19	23	19	15	17	14	11	11	9	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4643	4643	4643
5°	4663	4444	4419
10°	4631	4290	4228
15°	4566	4131	4032
20°	4484	3963	3845
25°	4402	3803	3676
30°	4288	3641	3508
35°	4172	3483	3386
40°	4052	3348	3264
45°	3936	3226	3157
50°	3812	3112	3052
55°	3680	2991	2946
60°	3520	2866	2832
65°	3356	2723	2703
70°	3166	2568	2563
75°	2926	2413	2433
80°	2547	2250	2296
85°	2161	2101	2180

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3936 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.8	0.6
10°-20°	79.7	1.7
20°-30°	120.8	2.6
30°-40°	147.1	3.2
40°-50°	158.3	3.5
50°-60°	153.7	3.4
60°-70°	134.3	2.9
70°-80°	103.3	2.3
80°-90°	72.4	1.6
90°-100°	248.1	5.4
100°-110°	712.0	15.6
110°-120°	734.8	16.1
120°-130°	598.1	13.1
130°-140°	475.7	10.4
140°-150°	356.2	7.8
150°-160°	249.8	5.5
160°-170°	147.1	3.2
170°-180°	47.8	1.0
0°-30°	228.3	5.0
0°-40°	375.5	8.2
0°-60°	687.5	15.1
0°-90°	997.4	21.8
90°-120°	1694.8	37.1
90°-150°	3124.9	68.4
90°-180°	3570.0	78.2
0°-180°	4567.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	293	293	293	293	293	
5°	294	293	290	293	292	28
15°	280	281	281	285	285	79
25°	255	258	262	267	268	117
35°	220	227	235	244	247	137
45°	180	192	207	220	224	139
55°	138	153	176	191	196	124
65°	94	115	140	158	163	94
75°	52	76	103	122	127	55
85°	15	42	69	87	93	16
90°	5	42	88	104	110	5
95°	37	105	421	206	178	37
105°	118	189	741	1310	1127	126
115°	206	264	615	1254	1452	204
125°	286	338	581	1011	1173	254
135°	335	400	564	841	964	259
145°	382	439	557	694	761	240
155°	434	469	541	611	636	200
165°	473	487	518	549	558	133
175°	493	494	498	504	503	47
180°	494	494	494	494	494	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	293.3	293.3	293.3	293.3	293.3
2.5°	295.4	294.1	291.1	293.3	292.4
5°	294.1	292.8	290.3	292.8	292.4
7.5°	292.0	291.1	289.0	292.0	291.6
10°	289.4	288.6	287.3	290.7	290.3
12.5°	285.2	285.6	284.8	288.2	287.7
15°	280.5	281.4	281.4	285.2	284.8
17.5°	274.6	276.3	277.5	281.4	281.4
20°	268.6	270.7	272.4	277.1	277.1
22.5°	262.2	264.8	267.3	272.0	272.9
25°	255.0	258.0	261.8	266.9	268.2
27.5°	246.5	251.2	255.4	261.8	262.7
30°	238.0	243.5	249.1	255.9	257.1
32.5°	228.7	235.0	241.8	249.9	252.5
35°	219.7	227.0	235.0	244.4	247.4
37.5°	210.0	218.0	228.2	238.4	241.4
40°	200.2	209.5	221.0	232.1	235.9
42.5°	190.8	200.2	213.8	226.1	229.9
45°	180.2	191.7	206.6	219.7	224.0
47.5°	170.0	182.3	199.3	212.9	217.6
50°	159.4	172.6	191.7	206.1	210.8
52.5°	149.2	163.2	183.6	198.5	203.6
55°	138.1	153.4	175.5	190.8	196.4
57.5°	127.5	144.5	166.6	183.2	188.7
60°	116.0	134.3	158.5	174.7	180.6
62.5°	105.8	125.0	149.2	166.6	172.1
65°	94.4	115.2	140.3	157.7	163.2
67.5°	84.2	105.8	131.3	148.8	154.7
70°	73.1	95.2	121.6	139.8	144.9
72.5°	62.9	85.9	112.6	130.5	136.9
75°	52.3	76.1	103.3	121.6	127.1
77.5°	42.1	66.7	94.4	112.6	118.6
80°	31.9	57.8	85.4	103.3	109.2
82.5°	23.4	48.9	76.9	94.8	100.3
85°	15.3	41.7	68.9	86.7	92.7
87.5°	9.4	34.9	62.1	79.5	85.0
90°	5.3	41.8	88.4	104.0	109.6
92.5°	18.1	71.6	198.6	136.4	132.0
95°	36.7	105.1	421.4	205.6	178.4
97.5°	52.4	129.2	653.1	343.8	248.2
100°	76.2	150.8	793.1	620.2	403.1
102.5°	97.6	170.5	794.9	1005.0	722.7
105°	118.0	189.3	740.7	1309.9	1126.9
107.5°	140.8	208.0	690.2	1418.1	1398.1
110°	163.2	227.3	655.3	1396.6	1506.9

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	184.1	246.0	631.5	1332.5	1502.0
115°	206.0	264.3	614.6	1254.0	1452.0
117.5°	228.4	283.1	604.0	1179.3	1378.3
120°	249.3	301.4	594.8	1111.8	1307.9
122.5°	269.2	320.5	588.4	1058.9	1233.7
125°	285.9	338.2	580.8	1010.8	1172.8
127.5°	300.2	355.3	575.3	968.8	1115.3
130°	312.6	371.0	570.9	927.0	1067.2
132.5°	324.0	386.2	567.4	883.6	1017.7
135°	334.9	399.5	564.3	841.2	964.3
137.5°	345.3	410.8	562.2	798.2	912.5
140°	357.7	421.0	559.6	760.2	858.7
142.5°	370.0	429.5	558.7	723.9	805.3
145°	382.0	439.0	556.8	693.8	761.0
147.5°	395.3	446.6	553.9	667.4	721.0
150°	408.6	454.2	551.1	646.2	687.0
152.5°	421.9	461.8	546.3	628.6	659.4
155°	434.2	468.9	540.6	611.4	635.7
157.5°	444.7	474.6	534.9	595.3	614.8
160°	455.1	480.3	529.2	579.2	594.8
162.5°	465.6	484.6	524.5	563.9	575.8
165°	473.2	487.4	517.8	549.2	557.7
167.5°	479.8	490.3	512.1	535.9	540.6
170°	486.5	491.7	507.4	523.6	525.4
172.5°	490.3	493.2	501.7	512.6	513.1
175°	493.1	493.6	497.9	504.0	502.6
177.5°	495.0	494.1	494.1	497.9	495.0
180°	494.1	494.1	494.1	494.1	494.1

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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	7.09	7.77	8.25	8.92	10.54	10.17	10.84	11.33	11.99	13.62
	3H	8.54	9.15	9.71	10.31	11.94	12.75	13.35	13.91	14.51	16.15
	4H	9.01	9.59	10.19	10.75	12.39	13.99	14.57	15.17	15.73	17.37
	6H	9.29	9.82	10.47	10.98	12.63	15.28	15.81	16.46	16.97	18.62
	8H	9.34	9.85	10.53	11.02	12.67	15.93	16.44	17.12	17.62	19.26
	12H	9.35	9.83	10.54	11.00	12.67	16.65	17.13	17.84	18.30	19.97
4H	2H	8.13	8.70	9.31	9.86	11.50	10.48	11.06	11.66	12.22	13.86
	3H	9.82	10.30	11.01	11.49	13.14	13.26	13.74	14.44	14.93	16.58
	4H	10.43	10.88	11.62	12.05	13.72	14.67	15.12	15.86	16.29	17.96
	6H	10.84	11.23	12.03	12.42	14.08	16.12	16.51	17.32	17.70	19.36
	8H	10.94	11.30	12.13	12.49	14.17	16.88	17.24	18.07	18.42	20.10
	12H	10.98	11.31	12.19	12.50	14.18	17.70	18.03	18.90	19.22	20.90
8H	4H	11.21	11.57	12.40	12.76	14.43	14.80	15.16	15.99	16.34	18.02
	6H	11.83	12.13	13.05	13.36	15.03	16.42	16.72	17.63	17.94	19.62
	8H	12.05	12.32	13.27	13.52	15.21	17.30	17.57	18.52	18.77	20.46
	12H	12.18	12.41	13.40	13.61	15.33	18.29	18.52	19.51	19.72	21.45
12H	4H	11.40	11.73	12.61	12.92	14.60	14.76	15.09	15.97	16.28	17.97
	6H	12.17	12.43	13.38	13.63	15.33	16.44	16.70	17.65	17.91	19.60
	8H	12.46	12.69	13.68	13.89	15.62	17.36	17.59	18.58	18.79	20.52