

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: P999213

Luminaire Tested: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999213
REPORT IS A COMBINATION OF REPORTS P984962 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

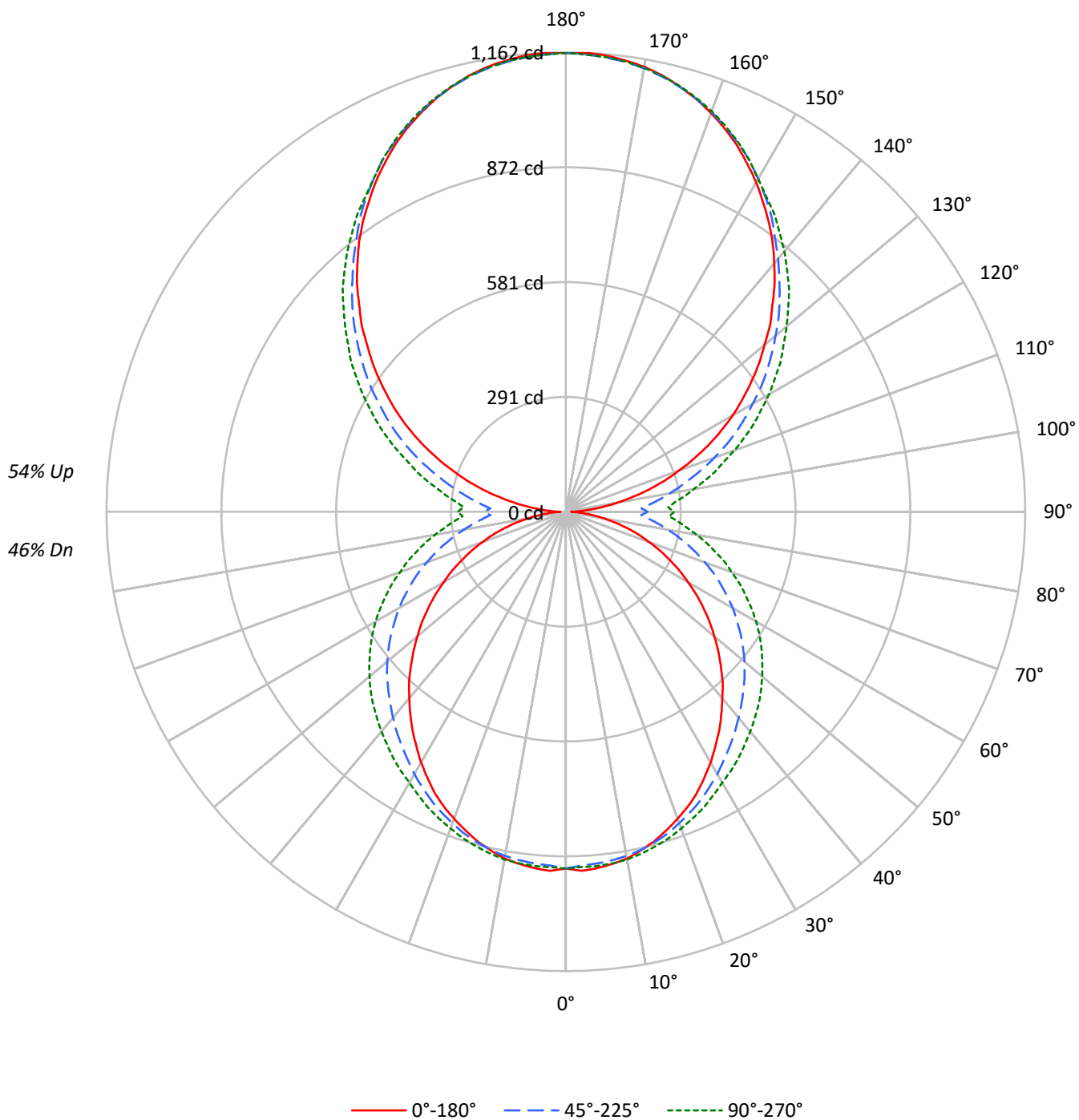
Lumens per Lamp: N/A
Luminaire Lumens: 6691.0 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 75.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	95	91	86	82	87	83	79	76	69	66	64	56	54	52	44	43	41
2	86	78	72	66	79	72	66	61	60	55	52	48	45	42	38	36	34
3	78	68	61	54	71	63	56	50	52	47	43	42	38	35	33	30	28
4	72	60	52	46	65	55	48	42	46	40	36	37	33	30	29	26	24
5	65	53	45	39	60	49	42	36	41	35	31	33	29	26	26	23	21
6	60	48	39	33	55	44	36	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	22	18	16
8	51	39	31	25	47	36	29	24	30	25	21	25	20	17	20	17	14
9	48	35	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	14	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14283	14283	14283
5°	14349	13674	13596
10°	14252	13200	13008
15°	14050	12710	12404
20°	13797	12196	11829
25°	13546	11704	11310
30°	13195	11202	10795
35°	12840	10720	10417
40°	12465	10303	10041
45°	12110	9925	9714
50°	11727	9576	9390
55°	11325	9205	9062
60°	10833	8819	8716
65°	10320	8376	8318
70°	9740	7899	7888
75°	9001	7423	7484
80°	7832	6928	7066
85°	6653	6461	6704

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12110 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	1.3
10°-20°	245.3	3.7
20°-30°	371.7	5.6
30°-40°	452.7	6.8
40°-50°	487.0	7.3
50°-60°	473.0	7.1
60°-70°	413.1	6.2
70°-80°	317.9	4.8
80°-90°	216.2	3.2
90°-100°	218.7	3.3
100°-110°	335.5	5.0
110°-120°	461.4	6.9
120°-130°	553.1	8.3
130°-140°	593.1	8.9
140°-150°	568.1	8.5
150°-160°	474.2	7.1
160°-170°	314.5	4.7
170°-180°	109.9	1.6
0°-30°	702.6	10.5
0°-40°	1155.3	17.3
0°-60°	2115.3	31.6
0°-90°	3062.5	45.8
90°-120°	1015.6	15.2
90°-150°	2729.8	40.8
90°-180°	3629.0	54.2
0°-180°	6691.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	902	902	902	902	902	
5°	905	901	893	901	900	86
15°	863	866	866	878	876	243
25°	785	794	806	821	825	361
35°	676	698	723	752	761	423
45°	554	590	636	676	689	428
55°	425	472	540	587	604	380
65°	290	354	432	485	502	288
75°	161	234	318	374	391	170
85°	47	128	212	267	285	50
90°	14	102	207	257	274	12
95°	61	133	213	263	276	65
105°	217	258	328	376	390	230
115°	397	417	474	512	524	392
125°	573	581	620	653	664	512
135°	739	750	765	791	799	571
145°	895	902	908	917	919	560
155°	1023	1026	1029	1034	1031	471
165°	1114	1113	1113	1119	1114	314
175°	1159	1156	1154	1161	1155	110
180°	1161	1161	1161	1161	1161	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	902.3	902.3	902.3	902.3	902.3
2.5°	908.9	905.0	895.8	902.3	899.7
5°	905.0	901.0	893.2	901.0	899.7
7.5°	898.4	895.8	889.3	898.4	897.1
10°	890.6	888.0	884.0	894.5	893.2
12.5°	877.5	878.8	876.2	886.6	885.3
15°	863.1	865.7	865.7	877.5	876.2
17.5°	844.8	850.0	854.0	865.7	865.7
20°	826.5	833.0	838.3	852.6	852.6
22.5°	806.9	814.7	822.6	836.9	839.6
25°	784.6	793.8	805.6	821.3	825.2
27.5°	758.5	772.9	785.9	805.6	808.2
30°	732.3	749.3	766.3	787.3	791.2
32.5°	703.6	723.2	744.1	768.9	776.8
35°	676.1	698.3	723.2	751.9	761.1
37.5°	646.0	670.9	702.3	733.6	742.8
40°	615.9	644.7	680.0	714.0	725.8
42.5°	587.2	615.9	657.8	695.7	707.5
45°	554.5	589.8	635.6	676.1	689.2
47.5°	523.1	561.0	613.3	655.2	669.6
50°	490.4	530.9	589.8	634.3	648.6
52.5°	459.0	502.2	564.9	610.7	626.4
55°	425.0	472.1	540.1	587.2	604.2
57.5°	392.3	444.6	512.6	563.6	580.6
60°	357.0	413.2	487.8	537.5	555.8
62.5°	325.6	384.5	459.0	512.6	529.6
65°	290.3	354.4	431.6	485.2	502.2
67.5°	258.9	325.6	404.1	457.7	476.0
70°	224.9	292.9	374.0	430.2	445.9
72.5°	193.5	264.2	346.5	401.5	421.1
75°	160.9	234.1	317.8	374.0	391.0
77.5°	129.5	205.3	290.3	346.5	364.9
80°	98.1	177.9	262.9	317.8	336.1
82.5°	71.9	150.4	236.7	291.6	308.6
85°	47.1	128.2	211.9	266.8	285.1
87.5°	28.8	107.2	190.9	244.5	261.5
90°	14.1	101.6	206.9	257.2	273.9
92.5°	33.3	110.5	191.3	243.2	258.8
95°	61.4	132.6	213.1	262.8	276.5
97.5°	94.4	159.4	239.1	287.5	303.2
100°	133.6	189.7	266.0	314.4	327.7
102.5°	173.3	222.4	296.9	345.0	358.4
105°	217.1	258.0	328.0	375.6	390.0
107.5°	262.1	297.4	362.8	408.3	417.8
110°	303.9	336.0	400.1	441.9	453.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	350.9	377.8	436.9	475.9	488.2
115°	396.9	417.2	474.2	512.4	523.8
117.5°	441.7	460.0	510.0	546.3	556.4
120°	487.7	500.8	545.3	581.9	593.4
122.5°	529.8	540.9	584.4	616.8	626.6
125°	572.6	581.4	620.4	652.7	663.5
127.5°	615.7	625.2	656.5	685.3	694.2
130°	655.8	667.3	692.8	722.3	728.7
132.5°	700.9	709.4	730.0	755.2	762.7
135°	738.8	749.5	764.6	791.0	798.6
137.5°	781.9	790.7	799.1	823.1	828.2
140°	820.1	827.6	835.1	856.0	859.9
142.5°	859.2	866.7	869.7	886.4	888.9
145°	895.1	902.0	907.9	916.7	919.3
147.5°	928.4	937.3	941.2	944.4	944.4
150°	962.7	968.6	972.5	975.5	972.5
152.5°	993.1	999.0	1003.9	1007.8	1003.9
155°	1023.4	1026.4	1029.3	1034.2	1031.3
157.5°	1049.9	1051.8	1053.8	1060.7	1055.8
160°	1073.4	1075.4	1076.3	1082.2	1078.3
162.5°	1094.9	1094.9	1095.9	1102.8	1097.9
165°	1113.5	1112.6	1112.6	1119.4	1114.5
167.5°	1130.2	1127.3	1127.3	1134.1	1129.2
170°	1142.9	1140.0	1139.0	1145.9	1140.0
172.5°	1151.7	1148.8	1147.8	1154.7	1148.8
175°	1158.6	1155.7	1153.7	1160.6	1154.7
177.5°	1162.5	1159.6	1157.6	1163.5	1157.6
180°	1160.6	1160.6	1160.6	1160.6	1160.6

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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	14.05	14.92	15.03	15.92	17.25	17.12	17.99	18.11	18.99	20.32
	3H	15.51	16.29	16.50	17.31	18.65	19.71	20.50	20.70	21.51	22.86
	4H	15.98	16.73	16.99	17.75	19.10	20.97	21.71	21.97	22.73	24.08
	6H	16.27	16.96	17.28	17.98	19.35	22.26	22.96	23.28	23.97	25.34
	8H	16.33	16.99	17.35	18.03	19.39	22.92	23.58	23.94	24.62	25.98
	12H	16.35	16.97	17.37	18.00	19.39	23.65	24.28	24.68	25.31	26.70
4H	2H	15.10	15.85	16.11	16.86	18.22	17.45	18.20	18.46	19.22	20.57
	3H	16.81	17.44	17.83	18.48	19.85	20.25	20.88	21.26	21.92	23.29
	4H	17.43	18.01	18.46	19.05	20.44	21.66	22.25	22.69	23.28	24.67
	6H	17.85	18.35	18.88	19.41	20.80	23.13	23.64	24.17	24.70	26.08
	8H	17.95	18.43	18.99	19.48	20.88	23.89	24.36	24.93	25.41	26.82
	12H	18.00	18.43	19.06	19.50	20.90	24.72	25.15	25.77	26.22	27.62
8H	4H	18.22	18.70	19.26	19.75	21.15	21.81	22.28	22.84	23.33	24.74
	6H	18.85	19.25	19.92	20.35	21.74	23.44	23.84	24.50	24.93	26.33
	8H	19.08	19.43	20.14	20.51	21.92	24.33	24.68	25.39	25.76	27.17
	12H	19.21	19.52	20.28	20.60	22.05	25.32	25.64	26.39	26.71	28.16
12H	4H	18.42	18.85	19.48	19.92	21.32	21.78	22.22	22.84	23.28	24.69
	6H	19.19	19.54	20.26	20.62	22.04	23.46	23.82	24.53	24.89	26.31
	8H	19.49	19.81	20.57	20.88	22.33	24.39	24.71	25.46	25.78	27.23