

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: P999212

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

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999212
REPORT IS A COMBINATION OF REPORTS P984961 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-D
Description: Define 2 Direct/Indirect Pendant with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

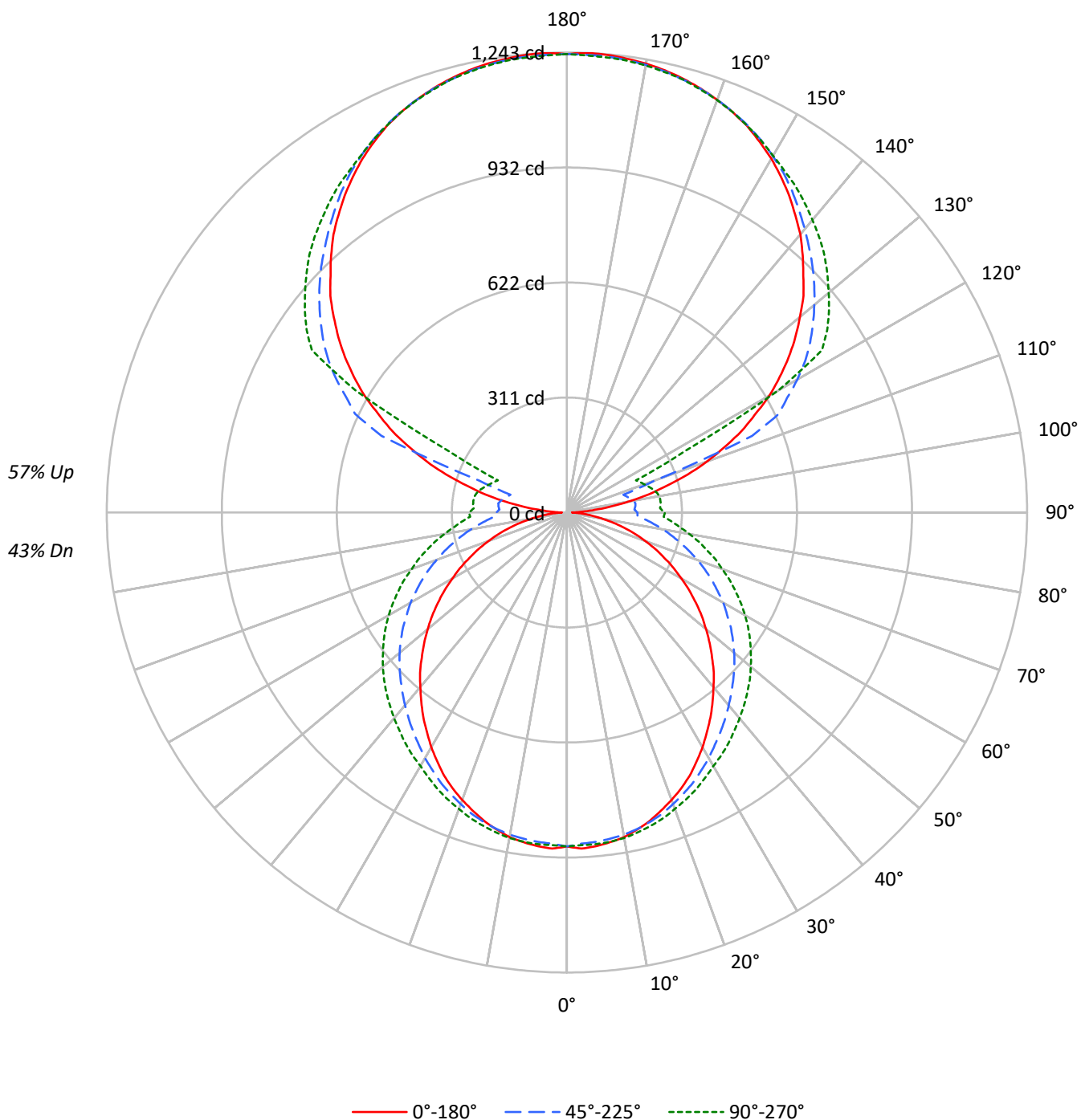
Lumens per Lamp: N/A
Luminaire Lumens: 7077.0 lumens
Efficiency: N/A
Efficacy: 94.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

Luminous Intensity Polar Plot



TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

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	96	96	96	96	80	80	80	64	64	64	50	50	50
1	95	90	86	82	86	82	79	75	68	65	63	54	52	51	42	41	40
2	86	78	71	66	78	71	66	61	59	54	51	47	44	41	36	34	32
3	78	68	60	54	71	62	55	50	51	46	42	41	37	34	32	29	27
4	71	60	52	45	65	55	48	42	45	40	35	36	32	29	28	25	23
5	65	53	45	39	59	49	41	36	40	35	30	32	28	25	25	22	20
6	60	47	39	33	54	44	36	31	36	30	26	29	25	22	23	20	17
7	55	43	35	29	50	39	32	27	33	27	23	26	22	19	21	18	15
8	51	39	31	25	47	36	29	24	30	24	20	24	20	17	19	16	13
9	48	35	28	22	43	32	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	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

TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	1.2
10°-20°	245.3	3.5
20°-30°	371.7	5.3
30°-40°	452.7	6.4
40°-50°	487.0	6.9
50°-60°	473.0	6.7
60°-70°	413.1	5.8
70°-80°	317.9	4.5
80°-90°	215.1	3.0
90°-100°	187.8	2.7
100°-110°	259.5	3.7
110°-120°	474.7	6.7
120°-130°	709.3	10.0
130°-140°	728.1	10.3
140°-150°	664.1	9.4
150°-160°	531.6	7.5
160°-170°	342.6	4.8
170°-180°	117.9	1.7
0°-30°	702.6	9.9
0°-40°	1155.3	16.3
0°-60°	2115.3	29.9
0°-90°	3061.3	43.3
90°-120°	922.0	13.0
90°-150°	3023.5	42.7
90°-180°	4016.0	56.7
0°-180°	7077.0	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	100	190	247	265	12
95°	69	101	185	240	254	77
105°	279	344	167	223	241	299
115°	521	550	632	256	206	512
125°	731	743	802	844	858	653
135°	903	917	939	975	984	698
145°	1046	1045	1060	1074	1077	655
155°	1152	1144	1155	1160	1153	531
165°	1214	1208	1211	1217	1211	343
175°	1242	1235	1237	1243	1234	118
180°	1239	1239	1239	1239	1239	

TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

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°	14.0	99.7	190.5	247.3	264.8
92.5°	34.2	99.9	182.4	235.2	251.7
95°	68.8	100.6	185.4	239.5	254.3
97.5°	114.1	96.8	186.9	238.0	254.6
100°	167.9	93.4	181.9	237.5	253.6
102.5°	225.6	267.0	174.5	231.4	248.5
105°	279.0	343.9	167.2	222.7	240.7
107.5°	342.7	396.5	159.8	214.1	232.1
110°	402.3	447.3	252.4	204.5	222.5

TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	459.7	496.8	541.7	197.2	214.2
115°	520.6	550.3	631.6	255.7	205.6
117.5°	572.2	600.6	670.8	581.8	360.0
120°	631.4	650.1	718.6	765.9	659.3
122.5°	681.6	697.2	763.6	804.2	816.9
125°	731.4	743.0	802.0	843.5	857.9
127.5°	778.0	789.2	838.0	879.7	892.3
130°	821.9	835.0	872.3	913.6	923.1
132.5°	866.7	877.1	906.5	944.7	954.3
135°	903.1	917.4	938.6	975.0	983.7
137.5°	942.5	953.3	968.7	1002.6	1009.0
140°	981.1	986.9	999.4	1028.4	1031.8
142.5°	1013.3	1018.3	1030.0	1052.8	1054.9
145°	1046.1	1045.2	1060.4	1074.5	1076.6
147.5°	1075.7	1073.0	1088.2	1094.0	1094.3
150°	1104.4	1098.1	1112.4	1117.8	1113.3
152.5°	1128.6	1121.4	1134.8	1140.2	1134.0
155°	1151.9	1143.8	1154.6	1159.9	1152.8
157.5°	1170.7	1163.5	1171.6	1177.9	1170.7
160°	1186.8	1181.5	1186.8	1192.2	1185.9
162.5°	1201.2	1195.8	1200.3	1206.6	1198.5
165°	1213.7	1208.4	1211.0	1217.3	1211.0
167.5°	1223.6	1218.2	1220.9	1227.2	1219.1
170°	1231.7	1226.3	1228.1	1234.3	1226.3
172.5°	1237.0	1231.7	1233.5	1239.7	1231.7
175°	1241.5	1235.2	1237.0	1243.3	1234.3
177.5°	1243.3	1237.0	1237.9	1244.2	1236.1
180°	1238.8	1238.8	1238.8	1238.8	1238.8

TEST NUMBER: P999212

CATALOG NUMBER: SA2XXDIP-B865D925UB27-4F0-XX-W2A-D

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	13.80	14.65	14.80	15.67	17.03	16.88	17.72	17.88	18.74	20.10
	3H	15.26	16.02	16.27	17.05	18.43	19.46	20.23	20.48	21.26	22.64
	4H	15.73	16.46	16.76	17.49	18.88	20.72	21.44	21.74	22.47	23.86
	6H	16.02	16.69	17.05	17.73	19.13	22.01	22.68	23.05	23.72	25.12
	8H	16.08	16.72	17.12	17.77	19.17	22.67	23.31	23.71	24.37	25.76
	12H	16.09	16.70	17.14	17.75	19.17	23.40	24.01	24.44	25.05	26.48
4H	2H	14.85	15.58	15.88	16.61	18.00	17.20	17.93	18.23	18.96	20.35
	3H	16.56	17.17	17.59	18.23	19.63	19.99	20.61	21.03	21.67	23.07
	4H	17.18	17.74	18.22	18.80	20.22	21.41	21.98	22.46	23.03	24.45
	6H	17.59	18.09	18.65	19.16	20.58	22.88	23.37	23.93	24.44	25.86
	8H	17.70	18.16	18.76	19.23	20.66	23.63	24.10	24.69	25.16	26.60
	12H	17.74	18.16	18.82	19.24	20.68	24.46	24.88	25.54	25.96	27.40
8H	4H	17.97	18.43	19.02	19.50	20.93	21.55	22.02	22.61	23.08	24.52
	6H	18.60	18.99	19.68	20.09	21.52	23.18	23.57	24.26	24.68	26.11
	8H	18.82	19.16	19.91	20.25	21.70	24.07	24.41	25.16	25.51	26.95
	12H	18.95	19.26	20.04	20.34	21.83	25.07	25.37	26.16	26.46	27.94
12H	4H	18.16	18.58	19.24	19.66	21.10	21.53	21.95	22.60	23.03	24.47
	6H	18.93	19.28	20.02	20.37	21.82	23.21	23.55	24.29	24.64	26.09
	8H	19.24	19.54	20.33	20.63	22.11	24.14	24.44	25.23	25.53	27.01