

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: P999255

Luminaire Tested: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P999255
REPORT IS A COMBINATION OF REPORTS P985004 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

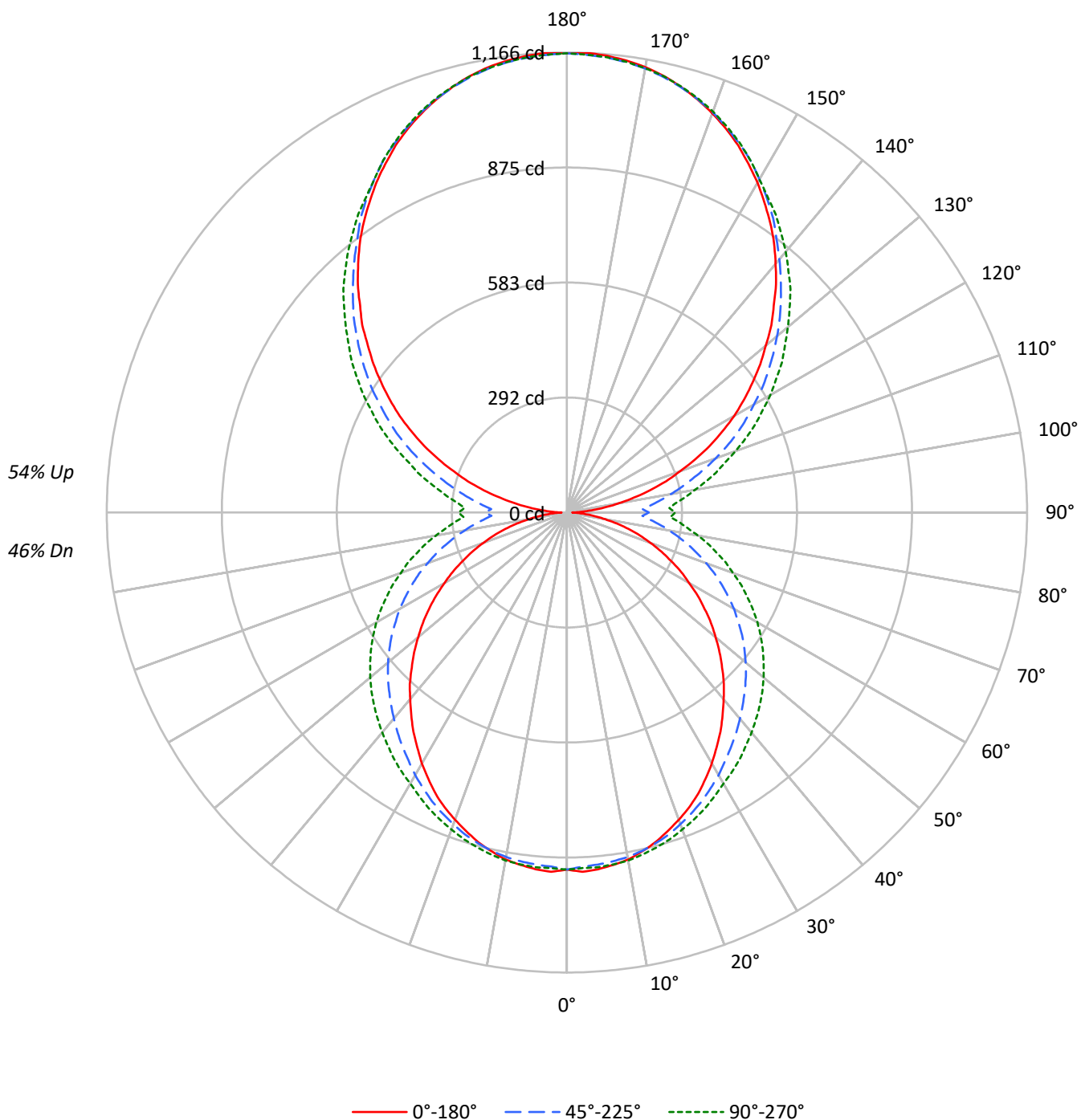
Lumens per Lamp: N/A
Luminaire Lumens: 6711.0 lumens
Efficiency: N/A
Efficacy: 89.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

Luminous Intensity Polar Plot



TEST NUMBER: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

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°	14326	14326	14326
5°	14390	13714	13636
10°	14294	13239	13046
15°	14091	12747	12439
20°	13837	12231	11864
25°	13585	11737	11343
30°	13234	11236	10827
35°	12878	10751	10447
40°	12502	10333	10070
45°	12145	9953	9742
50°	11761	9603	9417
55°	11357	9232	9087
60°	10863	8845	8741
65°	10352	8400	8341
70°	9770	7922	7911
75°	9023	7444	7505
80°	7856	6946	7087
85°	6667	6480	6723

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12145 cd/sqm

TEST NUMBER: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.8	1.3
10°-20°	246.0	3.7
20°-30°	372.8	5.6
30°-40°	454.0	6.8
40°-50°	488.4	7.3
50°-60°	474.4	7.1
60°-70°	414.3	6.2
70°-80°	318.8	4.8
80°-90°	216.9	3.2
90°-100°	219.3	3.3
100°-110°	336.5	5.0
110°-120°	462.8	6.9
120°-130°	554.8	8.3
130°-140°	594.9	8.9
140°-150°	569.9	8.5
150°-160°	475.7	7.1
160°-170°	315.5	4.7
170°-180°	110.3	1.6
0°-30°	704.6	10.5
0°-40°	1158.6	17.3
0°-60°	2121.4	31.6
0°-90°	3071.4	45.8
90°-120°	1018.6	15.2
90°-150°	2738.2	40.8
90°-180°	3640.0	54.2
0°-180°	6711.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	908	904	896	904	902	86
15°	866	868	868	880	879	244
25°	787	796	808	824	828	362
35°	678	700	725	754	763	424
45°	556	592	637	678	691	429
55°	426	474	542	589	606	381
65°	291	355	433	487	504	289
75°	161	235	319	375	392	171
85°	47	128	212	268	286	50
90°	14	102	208	258	275	12
95°	62	133	214	264	277	65
105°	218	259	329	377	391	231
115°	398	418	476	514	526	393
125°	574	583	622	655	666	514
135°	741	752	767	794	801	573
145°	898	905	911	920	922	561
155°	1027	1030	1032	1037	1034	473
165°	1117	1116	1116	1123	1118	315
175°	1162	1159	1157	1164	1158	110
180°	1164	1164	1164	1164	1164	

TEST NUMBER: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	905.0	905.0	905.0	905.0	905.0
2.5°	911.5	907.6	898.4	905.0	902.3
5°	907.6	903.6	895.8	903.6	902.3
7.5°	901.0	898.4	891.8	901.0	899.7
10°	893.2	890.5	886.6	897.1	895.8
12.5°	880.0	881.3	878.7	889.2	887.9
15°	865.6	868.2	868.2	880.0	878.7
17.5°	847.2	852.5	856.4	868.2	868.2
20°	828.9	835.4	840.7	855.1	855.1
22.5°	809.2	817.1	825.0	839.4	842.0
25°	786.9	796.1	807.9	823.6	827.6
27.5°	760.7	775.1	788.2	807.9	810.5
30°	734.5	751.5	768.6	789.5	793.5
32.5°	705.6	725.3	746.3	771.2	779.1
35°	678.1	700.4	725.3	754.1	763.3
37.5°	647.9	672.8	704.3	735.8	745.0
40°	617.7	646.6	682.0	716.1	727.9
42.5°	588.9	617.7	659.7	697.7	709.5
45°	556.1	591.5	637.4	678.1	691.2
47.5°	524.6	562.6	615.1	657.1	671.5
50°	491.8	532.5	591.5	636.1	650.5
52.5°	460.3	503.6	566.6	612.5	628.2
55°	426.2	473.5	541.7	588.9	605.9
57.5°	393.5	445.9	514.1	565.3	582.3
60°	358.0	414.4	489.2	539.0	557.4
62.5°	326.6	385.6	460.3	514.1	531.2
65°	291.2	355.4	432.8	486.6	503.6
67.5°	259.7	326.6	405.3	459.0	477.4
70°	225.6	293.8	375.1	431.5	447.2
72.5°	194.1	264.9	347.6	402.6	422.3
75°	161.3	234.8	318.7	375.1	392.1
77.5°	129.8	205.9	291.2	347.6	365.9
80°	98.4	178.4	263.6	318.7	337.1
82.5°	72.1	150.8	237.4	292.5	309.5
85°	47.2	128.5	212.5	267.6	285.9
87.5°	28.9	107.5	191.5	245.3	262.3
90°	14.1	102.0	207.5	258.0	274.7
92.5°	33.4	110.8	191.8	243.9	259.6
95°	61.6	133.0	213.7	263.6	277.3
97.5°	94.7	159.9	239.8	288.4	304.1
100°	134.0	190.3	266.8	315.3	328.7
102.5°	173.9	223.0	297.8	346.0	359.4
105°	217.8	258.8	328.9	376.8	391.2
107.5°	263.0	298.3	363.9	409.5	419.0
110°	304.8	337.0	401.2	443.2	454.7

TEST NUMBER: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	378.9	438.3	477.2	489.8
115°	398.2	418.5	475.6	513.9	525.5
117.5°	443.0	461.4	511.6	548.0	558.2
120°	489.2	502.4	546.9	583.7	595.2
122.5°	531.4	542.6	586.3	618.7	628.5
125°	574.3	583.2	622.2	654.7	665.5
127.5°	617.6	627.1	658.6	687.4	696.3
130°	657.9	669.3	695.0	724.4	731.0
132.5°	703.0	711.6	732.2	757.4	765.0
135°	741.0	751.8	766.9	793.5	801.1
137.5°	784.3	793.1	801.7	825.6	830.9
140°	822.6	830.1	837.6	858.6	862.6
142.5°	861.9	869.4	872.4	889.0	891.7
145°	897.9	904.8	910.7	919.6	922.1
147.5°	931.3	940.1	944.1	947.3	947.3
150°	965.7	971.6	975.5	978.5	975.5
152.5°	996.1	1002.0	1006.9	1010.9	1006.9
155°	1026.6	1029.5	1032.5	1037.4	1034.5
157.5°	1053.1	1055.1	1057.0	1063.9	1059.0
160°	1076.7	1078.7	1079.6	1085.5	1081.6
162.5°	1098.3	1098.3	1099.3	1106.2	1101.3
165°	1117.0	1116.0	1116.0	1122.9	1118.0
167.5°	1133.7	1130.7	1130.7	1137.6	1132.7
170°	1146.4	1143.5	1142.5	1149.4	1143.5
172.5°	1155.3	1152.3	1151.4	1158.2	1152.3
175°	1162.2	1159.2	1157.3	1164.1	1158.2
177.5°	1166.1	1163.1	1161.2	1167.1	1161.2
180°	1164.1	1164.1	1164.1	1164.1	1164.1

TEST NUMBER: P999255

CATALOG NUMBER: SA2XXDIP-B865D925UB40-4F0-XX-W2A-D1

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	14.06	14.93	15.04	15.93	17.26	17.13	18.00	18.12	19.01	20.33
	3H	15.52	16.30	16.51	17.32	18.66	19.72	20.51	20.71	21.52	22.87
	4H	15.99	16.74	17.00	17.76	19.11	20.98	21.72	21.98	22.74	24.09
	6H	16.28	16.97	17.29	17.99	19.36	22.27	22.96	23.29	23.98	25.35
	8H	16.34	17.00	17.36	18.03	19.40	22.93	23.59	23.95	24.63	25.99
	12H	16.36	16.98	17.38	18.01	19.40	23.66	24.29	24.68	25.32	26.71
4H	2H	15.11	15.86	16.12	16.87	18.22	17.46	18.21	18.47	19.23	20.58
	3H	16.82	17.45	17.84	18.49	19.86	20.26	20.89	21.27	21.93	23.30
	4H	17.44	18.02	18.47	19.06	20.45	21.67	22.26	22.70	23.29	24.68
	6H	17.86	18.36	18.89	19.42	20.81	23.14	23.65	24.18	24.71	26.09
	8H	17.96	18.44	19.00	19.49	20.89	23.90	24.37	24.94	25.42	26.83
	12H	18.01	18.44	19.06	19.51	20.91	24.73	25.16	25.78	26.23	27.63
8H	4H	18.23	18.71	19.27	19.76	21.16	21.82	22.29	22.85	23.34	24.75
	6H	18.86	19.26	19.92	20.36	21.75	23.45	23.85	24.51	24.94	26.34
	8H	19.09	19.44	20.15	20.52	21.93	24.34	24.69	25.40	25.77	27.18
	12H	19.22	19.53	20.29	20.61	22.06	25.33	25.65	26.40	26.72	28.17
12H	4H	18.43	18.86	19.49	19.93	21.33	21.79	22.23	22.85	23.29	24.70
	6H	19.20	19.55	20.27	20.63	22.05	23.47	23.83	24.54	24.90	26.32
	8H	19.50	19.82	20.58	20.89	22.34	24.40	24.72	25.47	25.79	27.24