

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: P997999

Luminaire Tested: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997999
REPORT IS A COMBINATION OF REPORTS P983736 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

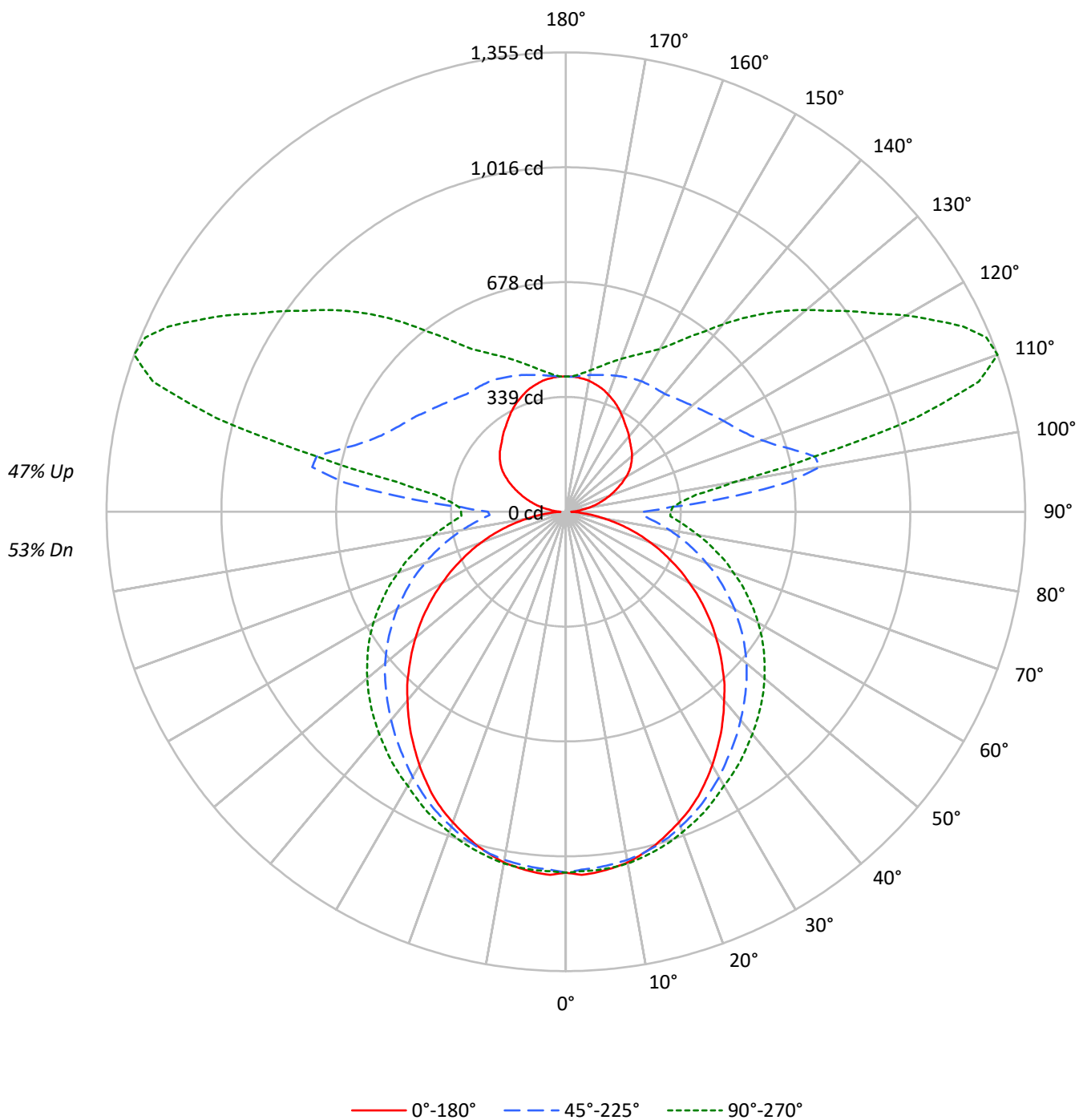
Lumens per Lamp: N/A
Luminaire Lumens: 6843.2 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 82.4
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: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

Luminous Intensity Polar Plot



TEST NUMBER: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	59	59	59
1	97	92	87	83	89	85	81	77	72	69	66	60	58	56	49	48	46
2	88	79	72	67	80	73	67	62	62	58	54	52	49	46	43	40	38
3	79	69	61	55	73	64	57	51	54	49	44	45	41	38	37	34	32
4	72	61	52	46	67	56	49	43	48	42	37	40	36	32	33	30	27
5	66	54	45	39	61	50	42	37	43	37	32	36	31	27	29	26	23
6	61	48	40	34	56	45	37	32	38	32	28	32	28	24	27	23	20
7	56	44	35	29	52	40	33	28	35	29	24	29	25	21	24	21	18
8	52	39	31	26	48	37	29	24	32	26	21	27	22	19	22	19	16
9	49	36	28	23	45	34	26	22	29	23	19	25	20	17	20	17	14
10	45	33	25	20	42	31	24	19	27	21	17	23	18	15	19	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16847	16847	16847
5°	16924	16128	16037
10°	16809	15569	15342
15°	16572	14992	14631
20°	16273	14385	13954
25°	15978	13805	13340
30°	15564	13214	12733
35°	15146	12644	12286
40°	14704	12153	11844
45°	14283	11705	11458
50°	13832	11295	11076
55°	13358	10856	10688
60°	12778	10401	10279
65°	12172	9879	9810
70°	11489	9316	9305
75°	10612	8755	8828
80°	9237	8169	8334
85°	7840	7620	7908

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14283 cd/sqm

TEST NUMBER: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	1.5
10°-20°	289.4	4.2
20°-30°	438.5	6.4
30°-40°	533.9	7.8
40°-50°	574.5	8.4
50°-60°	557.9	8.2
60°-70°	487.2	7.1
70°-80°	375.0	5.5
80°-90°	253.7	3.7
90°-100°	334.9	4.9
100°-110°	672.9	9.8
110°-120°	657.9	9.6
120°-130°	518.8	7.6
130°-140°	399.1	5.8
140°-150°	290.0	4.2
150°-160°	201.6	2.9
160°-170°	118.7	1.7
170°-180°	38.6	0.6
0°-30°	828.7	12.1
0°-40°	1362.6	19.9
0°-60°	2495.0	36.5
0°-90°	3610.8	52.8
90°-120°	1665.6	24.3
90°-150°	2873.5	42.0
90°-180°	3232.0	47.2
0°-180°	6843.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1064	1064	1064	1064	1064	
5°	1067	1063	1054	1063	1061	101
15°	1018	1021	1021	1035	1034	287
25°	926	936	950	969	973	426
35°	798	824	853	887	898	498
45°	654	696	750	798	813	505
55°	501	557	637	693	713	448
65°	342	418	509	572	592	340
75°	190	276	375	441	461	201
85°	56	151	250	315	336	59
90°	16	115	230	290	309	13
95°	39	151	478	349	342	37
105°	101	194	701	1202	1068	108
115°	171	231	568	1120	1293	169
125°	233	275	509	889	1030	208
135°	271	324	469	717	826	210
145°	308	354	449	567	627	194
155°	350	378	436	493	513	161
165°	382	393	418	443	450	108
175°	398	398	402	407	406	38
180°	399	399	399	399	399	

TEST NUMBER: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1064.3	1064.3	1064.3	1064.3	1064.3
2.5°	1072.0	1067.4	1056.6	1064.3	1061.2
5°	1067.4	1062.8	1053.5	1062.8	1061.2
7.5°	1059.7	1056.6	1048.9	1059.7	1058.1
10°	1050.4	1047.3	1042.7	1055.0	1053.5
12.5°	1035.0	1036.5	1033.5	1045.8	1044.2
15°	1018.0	1021.1	1021.1	1035.0	1033.5
17.5°	996.4	1002.6	1007.2	1021.1	1021.1
20°	974.8	982.6	988.7	1005.7	1005.7
22.5°	951.7	961.0	970.2	987.2	990.3
25°	925.5	936.3	950.2	968.7	973.3
27.5°	894.6	911.6	927.0	950.2	953.2
30°	863.8	883.8	903.9	928.6	933.2
32.5°	829.8	853.0	877.7	907.0	916.2
35°	797.5	823.7	853.0	886.9	897.7
37.5°	762.0	791.3	828.3	865.3	876.1
40°	726.5	760.4	802.1	842.2	856.1
42.5°	692.6	726.5	775.9	820.6	834.5
45°	654.0	695.7	749.6	797.5	812.9
47.5°	617.0	661.7	723.4	772.8	789.7
50°	578.4	626.2	695.7	748.1	765.1
52.5°	541.4	592.3	666.3	720.3	738.8
55°	501.3	556.8	637.0	692.6	712.6
57.5°	462.7	524.4	604.6	664.8	684.9
60°	421.1	487.4	575.3	634.0	655.5
62.5°	384.1	453.5	541.4	604.6	624.7
65°	342.4	418.0	509.0	572.3	592.3
67.5°	305.4	384.1	476.6	539.9	561.5
70°	265.3	345.5	441.1	507.5	526.0
72.5°	228.3	311.6	408.8	473.5	496.7
75°	189.7	276.1	374.8	441.1	461.2
77.5°	152.7	242.2	342.4	408.8	430.3
80°	115.7	209.8	310.0	374.8	396.4
82.5°	84.8	177.4	279.2	344.0	364.0
85°	55.5	151.2	249.9	314.7	336.3
87.5°	33.9	126.5	225.2	288.4	308.5
90°	16.2	115.2	229.7	290.2	309.1
92.5°	25.4	132.0	307.8	304.4	315.2
95°	39.1	150.7	477.9	349.4	341.9
97.5°	50.7	164.2	656.5	451.4	388.6
100°	69.8	174.4	759.9	664.8	502.8
102.5°	86.0	184.4	752.9	965.7	751.1
105°	101.2	193.5	700.8	1202.0	1067.7
107.5°	119.6	202.6	651.7	1279.9	1276.9
110°	136.5	212.2	616.3	1253.0	1355.0

TEST NUMBER: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	153.4	222.5	588.7	1192.8	1342.7
115°	171.0	231.2	567.9	1119.8	1292.8
117.5°	187.8	241.6	551.0	1051.1	1223.7
120°	204.7	251.6	536.4	987.0	1158.5
122.5°	220.8	263.4	524.0	936.0	1087.9
125°	233.1	275.2	509.4	888.8	1030.3
127.5°	244.6	287.8	497.9	845.4	974.2
130°	254.6	300.5	487.0	803.2	925.9
132.5°	263.8	312.8	477.1	759.8	877.5
135°	271.4	323.5	468.6	717.2	826.1
137.5°	279.8	332.7	460.9	674.2	774.7
140°	289.8	339.6	453.9	635.0	721.7
142.5°	299.7	346.5	450.8	598.5	670.2
145°	308.2	354.2	449.3	567.1	627.3
147.5°	318.9	360.4	447.0	539.8	586.6
150°	329.7	366.5	444.7	521.4	554.3
152.5°	340.4	372.6	440.9	507.2	532.1
155°	350.4	378.4	436.3	493.4	512.9
157.5°	358.8	383.0	431.7	480.4	496.1
160°	367.2	387.6	427.1	467.3	480.0
162.5°	375.7	391.0	423.2	455.0	464.6
165°	381.8	393.3	417.9	443.2	450.1
167.5°	387.2	395.6	413.3	432.4	436.3
170°	392.5	396.8	409.4	422.4	424.0
172.5°	395.6	397.9	404.8	413.6	414.0
175°	397.9	398.3	401.7	406.7	405.6
177.5°	399.4	398.7	398.7	401.7	399.4
180°	398.7	398.7	398.7	398.7	398.7

TEST NUMBER: P997999

CATALOG NUMBER: SA2XXDIP-B1005D725UB35-4F0-XX-W2A-D4

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	15.27	16.21	16.19	17.16	18.38	18.34	19.28	19.26	20.23	21.46
	3H	16.73	17.58	17.67	18.54	19.79	20.94	21.79	21.87	22.75	23.99
	4H	17.21	18.02	18.16	18.98	20.24	22.19	23.00	23.14	23.96	25.22
	6H	17.50	18.25	18.46	19.22	20.49	23.49	24.24	24.45	25.21	26.48
	8H	17.56	18.28	18.52	19.26	20.53	24.15	24.87	25.12	25.86	27.13
	12H	17.58	18.26	18.55	19.24	20.54	24.88	25.57	25.85	26.55	27.84
4H	2H	16.33	17.14	17.28	18.10	19.35	18.68	19.49	19.63	20.45	21.71
	3H	18.04	18.73	19.00	19.72	20.99	21.48	22.17	22.44	23.16	24.43
	4H	18.66	19.30	19.63	20.28	21.58	22.90	23.53	23.87	24.51	25.81
	6H	19.08	19.64	20.07	20.64	21.94	24.37	24.92	25.35	25.93	27.22
	8H	19.19	19.71	20.18	20.71	22.02	25.13	25.65	26.11	26.65	27.96
	12H	19.24	19.71	20.25	20.73	22.05	25.96	26.43	26.97	27.45	28.77
8H	4H	19.46	19.98	20.44	20.98	22.29	23.05	23.57	24.03	24.57	25.88
	6H	20.10	20.53	21.11	21.58	22.88	24.68	25.12	25.69	26.16	27.46
	8H	20.32	20.71	21.34	21.74	23.06	25.57	25.96	26.59	26.99	28.31
	12H	20.46	20.80	21.48	21.83	23.19	26.57	26.91	27.59	27.94	29.31
12H	4H	19.66	20.13	20.67	21.15	22.47	23.03	23.50	24.03	24.51	25.83
	6H	20.43	20.82	21.45	21.85	23.17	24.71	25.10	25.72	26.12	27.45
	8H	20.74	21.09	21.76	22.11	23.48	25.64	25.98	26.66	27.01	28.37