

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: P997990

Luminaire Tested: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997990
REPORT IS A COMBINATION OF REPORTS P983727 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

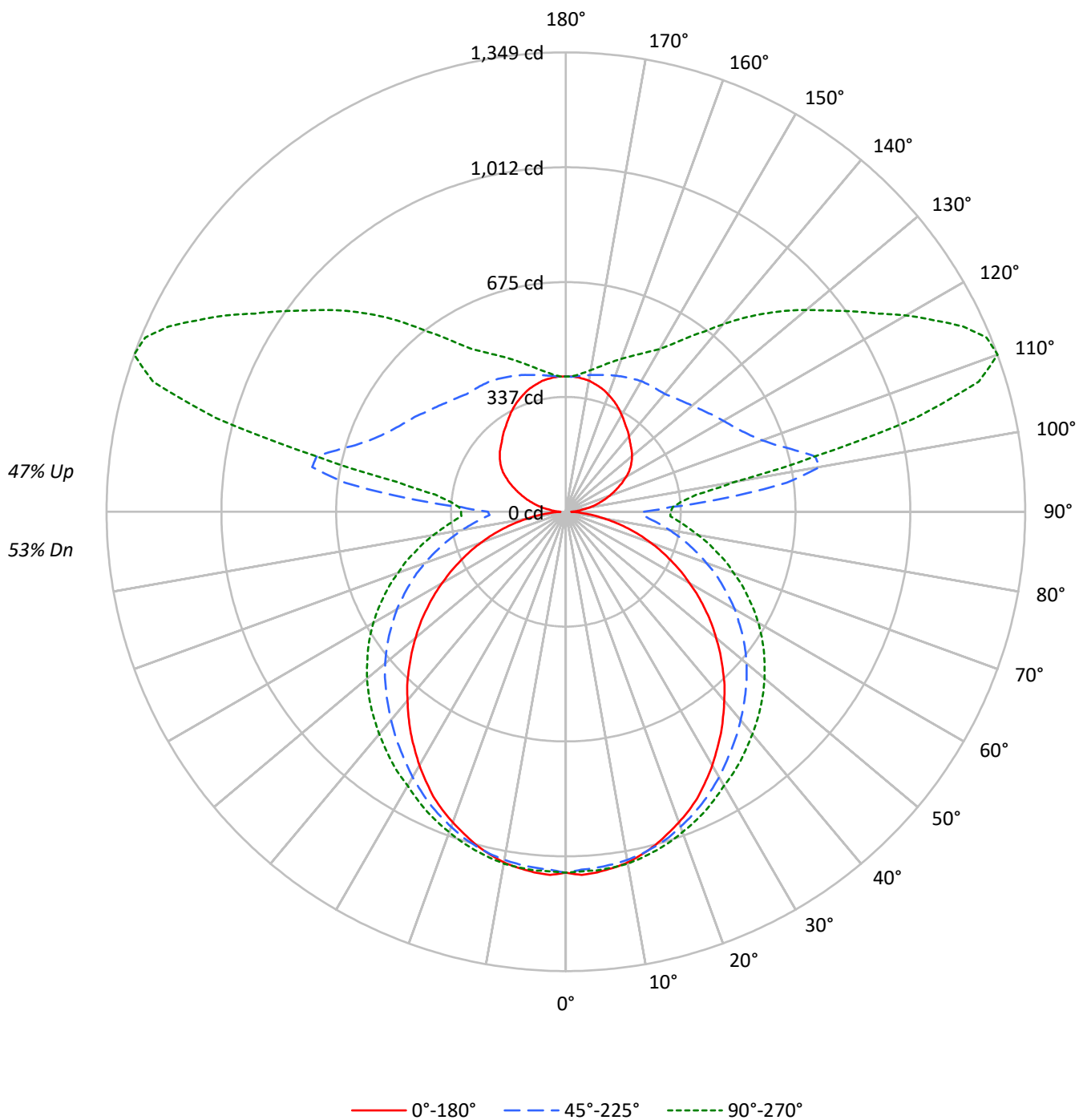
Lumens per Lamp: N/A
Luminaire Lumens: 6814.2 lumens
Efficiency: N/A
Efficacy: 82.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P997990

CATALOG NUMBER: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4

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	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	81	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°	16776	16776	16776
5°	16852	16061	15970
10°	16739	15504	15278
15°	16503	14928	14568
20°	16206	14325	13895
25°	15911	13746	13284
30°	15499	13158	12680
35°	15081	12591	12236
40°	14643	12101	11794
45°	14224	11657	11410
50°	13774	11247	11030
55°	13302	10812	10643
60°	12723	10358	10237
65°	12122	9838	9768
70°	11442	9278	9266
75°	10567	8720	8791
80°	9197	8135	8300
85°	7811	7586	7873

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14224 cd/sqm

TEST NUMBER: P997990

CATALOG NUMBER: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	1.5
10°-20°	288.2	4.2
20°-30°	436.6	6.4
30°-40°	531.7	7.8
40°-50°	572.0	8.4
50°-60°	555.5	8.2
60°-70°	485.2	7.1
70°-80°	373.4	5.5
80°-90°	252.6	3.7
90°-100°	333.5	4.9
100°-110°	670.0	9.8
110°-120°	655.0	9.6
120°-130°	516.6	7.6
130°-140°	397.3	5.8
140°-150°	288.7	4.2
150°-160°	200.7	2.9
160°-170°	118.2	1.7
170°-180°	38.4	0.6
0°-30°	825.2	12.1
0°-40°	1356.9	19.9
0°-60°	2484.5	36.5
0°-90°	3595.7	52.8
90°-120°	1658.5	24.3
90°-150°	2861.2	42.0
90°-180°	3218.0	47.2
0°-180°	6814.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1063	1058	1049	1058	1057	101
15°	1014	1017	1017	1031	1029	286
25°	922	932	946	965	969	424
35°	794	820	849	883	894	496
45°	651	693	746	794	810	503
55°	499	554	634	690	710	447
65°	341	416	507	570	590	339
75°	189	275	373	439	459	200
85°	55	150	249	313	335	58
90°	16	115	229	289	308	13
95°	39	150	476	348	340	37
105°	101	193	698	1197	1063	108
115°	170	230	566	1115	1287	168
125°	232	274	507	885	1026	207
135°	270	322	466	714	822	209
145°	307	353	447	565	625	193
155°	349	377	434	491	511	161
165°	380	392	416	441	448	107
175°	396	397	400	405	404	38
180°	397	397	397	397	397	

TEST NUMBER: P997990

CATALOG NUMBER: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.8	1059.8	1059.8	1059.8	1059.8
2.5°	1067.5	1062.9	1052.2	1059.8	1056.8
5°	1062.9	1058.3	1049.1	1058.3	1056.8
7.5°	1055.2	1052.2	1044.5	1055.2	1053.7
10°	1046.0	1042.9	1038.3	1050.6	1049.1
12.5°	1030.7	1032.2	1029.1	1041.4	1039.9
15°	1013.8	1016.8	1016.8	1030.7	1029.1
17.5°	992.3	998.4	1003.0	1016.8	1016.8
20°	970.8	978.4	984.6	1001.5	1001.5
22.5°	947.7	956.9	966.1	983.0	986.1
25°	921.6	932.4	946.2	964.6	969.2
27.5°	890.9	907.8	923.1	946.2	949.3
30°	860.2	880.1	900.1	924.7	929.3
32.5°	826.4	849.4	874.0	903.2	912.4
35°	794.1	820.2	849.4	883.2	894.0
37.5°	758.8	788.0	824.8	861.7	872.5
40°	723.5	757.3	798.7	838.7	852.5
42.5°	689.7	723.5	772.6	817.2	831.0
45°	651.3	692.7	746.5	794.1	809.5
47.5°	614.4	658.9	720.4	769.5	786.4
50°	576.0	623.6	692.7	745.0	761.9
52.5°	539.1	589.8	663.6	717.3	735.7
55°	499.2	554.5	634.4	689.7	709.6
57.5°	460.8	522.2	602.1	662.0	682.0
60°	419.3	485.4	572.9	631.3	652.8
62.5°	382.5	451.6	539.1	602.1	622.1
65°	341.0	416.3	506.9	569.9	589.8
67.5°	304.1	382.5	474.6	537.6	559.1
70°	264.2	344.1	439.3	505.3	523.8
72.5°	227.3	310.3	407.0	471.6	494.6
75°	188.9	274.9	373.3	439.3	459.3
77.5°	152.1	241.2	341.0	407.0	428.5
80°	115.2	208.9	308.7	373.3	394.8
82.5°	84.5	176.6	278.0	342.5	362.5
85°	55.3	150.5	248.8	313.3	334.8
87.5°	33.8	126.0	224.3	287.2	307.2
90°	16.2	114.8	228.8	289.0	307.8
92.5°	25.3	131.5	306.5	303.0	313.9
95°	39.0	150.2	475.8	348.0	340.4
97.5°	50.5	163.4	653.7	449.4	387.0
100°	69.6	173.7	756.7	661.9	500.6
102.5°	85.5	183.6	749.7	961.5	747.8
105°	100.8	192.7	697.8	1197.0	1063.1
107.5°	119.2	201.8	648.8	1274.4	1271.5
110°	135.9	211.4	613.6	1247.6	1349.2

TEST NUMBER: P997990

CATALOG NUMBER: SA2XXDIP-B1005D725UB30-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	152.7	221.6	586.2	1187.6	1336.9
115°	170.2	230.3	565.5	1115.0	1287.2
117.5°	187.0	240.6	548.6	1046.6	1218.4
120°	203.8	250.5	534.0	982.8	1153.5
122.5°	219.9	262.2	521.8	931.9	1083.2
125°	232.1	274.1	507.2	885.0	1025.9
127.5°	243.6	286.6	495.7	841.8	970.0
130°	253.5	299.2	485.0	799.7	921.9
132.5°	262.7	311.4	475.0	756.5	873.8
135°	270.2	322.1	466.5	714.1	822.5
137.5°	278.6	331.3	458.8	671.2	771.4
140°	288.5	338.2	452.0	632.2	718.6
142.5°	298.5	345.0	448.9	595.9	667.3
145°	306.9	352.7	447.3	564.6	624.6
147.5°	317.6	358.8	445.1	537.4	584.0
150°	328.3	364.9	442.8	519.1	551.9
152.5°	338.9	371.0	438.9	505.0	529.8
155°	348.9	376.8	434.4	491.2	510.7
157.5°	357.3	381.3	429.8	478.2	493.9
160°	365.7	385.9	425.2	465.3	477.9
162.5°	374.1	389.4	421.4	453.1	462.6
165°	380.2	391.6	416.0	441.2	448.1
167.5°	385.5	393.9	411.5	430.6	434.4
170°	390.9	395.0	407.6	420.6	422.2
172.5°	393.9	396.2	403.1	411.8	412.2
175°	396.2	396.6	400.0	405.0	403.8
177.5°	397.7	397.0	397.0	400.0	397.7
180°	397.0	397.0	397.0	397.0	397.0

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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	15.25	16.19	16.17	17.14	18.37	18.33	19.27	19.25	20.22	21.44
	3H	16.72	17.57	17.65	18.53	19.78	20.92	21.77	21.85	22.73	23.98
	4H	17.20	18.01	18.14	18.97	20.23	22.18	22.99	23.12	23.95	25.21
	6H	17.49	18.24	18.44	19.20	20.47	23.48	24.23	24.44	25.20	26.47
	8H	17.55	18.26	18.51	19.25	20.52	24.14	24.86	25.10	25.84	27.11
	12H	17.57	18.25	18.54	19.23	20.52	24.87	25.55	25.84	26.53	27.83
4H	2H	16.31	17.12	17.26	18.08	19.34	18.67	19.48	19.62	20.44	21.70
	3H	18.03	18.71	18.99	19.70	20.98	21.46	22.15	22.42	23.14	24.41
	4H	18.65	19.28	19.62	20.27	21.56	22.88	23.52	23.85	24.50	25.80
	6H	19.07	19.62	20.05	20.63	21.92	24.36	24.91	25.34	25.92	27.21
	8H	19.18	19.70	20.16	20.70	22.01	25.11	25.63	26.10	26.63	27.94
	12H	19.23	19.70	20.23	20.72	22.03	25.95	26.42	26.95	27.44	28.75
8H	4H	19.45	19.96	20.43	20.97	22.28	23.03	23.55	24.02	24.55	25.86
	6H	20.08	20.52	21.09	21.56	22.87	24.67	25.10	25.67	26.14	27.45
	8H	20.31	20.69	21.32	21.72	23.05	25.56	25.95	26.57	26.97	28.30
	12H	20.44	20.79	21.47	21.81	23.18	26.56	26.90	27.58	27.92	29.29
12H	4H	19.65	20.12	20.65	21.14	22.45	23.01	23.48	24.02	24.50	25.82
	6H	20.42	20.81	21.43	21.84	23.16	24.69	25.08	25.71	26.11	27.43
	8H	20.73	21.07	21.75	22.09	23.46	25.63	25.97	26.65	26.99	28.36

END OF REPORT