

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: P998008

Luminaire Tested: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-D4

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998008
REPORT IS A COMBINATION OF REPORTS P983745 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-D4
Description: Define 2 Direct/Indirect Pendant with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

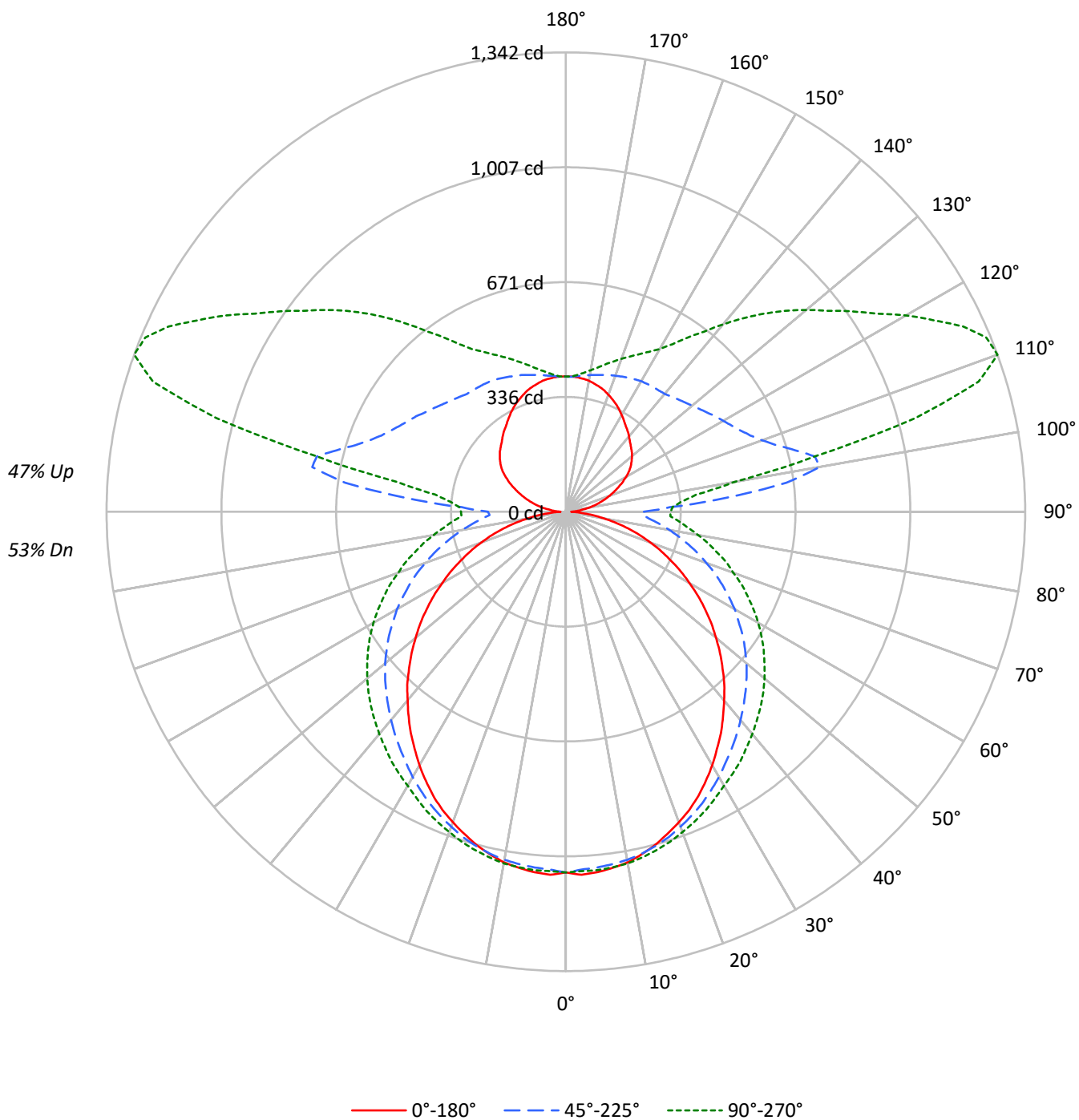
Lumens per Lamp: N/A
Luminaire Lumens: 6776.2 lumens
Efficiency: N/A
Efficacy: 82.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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: P998008

CATALOG NUMBER: SA2XXDIP-B1005D725UB40-4F0-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	80	73	67	62	62	58	54	52	49	46	42	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°	16681	16681	16681
5°	16757	15969	15880
10°	16645	15416	15191
15°	16409	14845	14486
20°	16112	14243	13816
25°	15821	13668	13209
30°	15411	13083	12607
35°	14996	12520	12166
40°	14558	12033	11726
45°	14144	11591	11345
50°	13695	11183	10966
55°	13227	10751	10583
60°	12651	10300	10179
65°	12055	9782	9714
70°	11377	9225	9213
75°	10511	8668	8741
80°	9141	8090	8252
85°	7769	7544	7828

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 14144 cd/sqm

TEST NUMBER: P998008

CATALOG NUMBER: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	1.5
10°-20°	286.5	4.2
20°-30°	434.1	6.4
30°-40°	528.7	7.8
40°-50°	568.8	8.4
50°-60°	552.4	8.2
60°-70°	482.4	7.1
70°-80°	371.3	5.5
80°-90°	251.2	3.7
90°-100°	331.6	4.9
100°-110°	666.4	9.8
110°-120°	651.5	9.6
120°-130°	513.8	7.6
130°-140°	395.2	5.8
140°-150°	287.2	4.2
150°-160°	199.6	2.9
160°-170°	117.5	1.7
170°-180°	38.2	0.6
0°-30°	820.6	12.1
0°-40°	1349.2	19.9
0°-60°	2470.4	36.5
0°-90°	3575.3	52.8
90°-120°	1649.4	24.3
90°-150°	2845.6	42.0
90°-180°	3201.0	47.2
0°-180°	6776.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1054	1054	1054	1054	1054	
5°	1057	1052	1043	1052	1051	100
15°	1008	1011	1011	1025	1023	284
25°	916	927	941	959	964	421
35°	790	816	845	878	889	494
45°	648	689	742	790	805	500
55°	496	551	631	686	706	444
65°	339	414	504	567	586	337
75°	188	273	371	437	457	199
85°	55	150	247	312	333	58
90°	16	114	227	287	306	12
95°	39	149	473	346	339	37
105°	100	192	694	1190	1057	107
115°	169	229	562	1109	1280	167
125°	231	273	504	880	1020	206
135°	269	320	464	710	818	208
145°	305	351	445	562	621	192
155°	347	375	432	489	508	160
165°	378	390	414	439	446	107
175°	394	394	398	403	402	37
180°	395	395	395	395	395	

TEST NUMBER: P998008

CATALOG NUMBER: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1053.8	1053.8	1053.8	1053.8	1053.8
2.5°	1061.5	1056.9	1046.2	1053.8	1050.8
5°	1056.9	1052.3	1043.1	1052.3	1050.8
7.5°	1049.2	1046.2	1038.5	1049.2	1047.7
10°	1040.1	1037.0	1032.4	1044.7	1043.1
12.5°	1024.8	1026.3	1023.3	1035.5	1034.0
15°	1008.0	1011.1	1011.1	1024.8	1023.3
17.5°	986.6	992.7	997.3	1011.1	1011.1
20°	965.2	972.9	979.0	995.8	995.8
22.5°	942.3	951.5	960.7	977.5	980.5
25°	916.4	927.1	940.8	959.1	963.7
27.5°	885.8	902.6	917.9	940.8	943.9
30°	855.3	875.1	895.0	919.4	924.0
32.5°	821.7	844.6	869.0	898.0	907.2
35°	789.6	815.6	844.6	878.2	888.9
37.5°	754.5	783.5	820.1	856.8	867.5
40°	719.3	752.9	794.2	833.9	847.6
42.5°	685.7	719.3	768.2	812.5	826.3
45°	647.6	688.8	742.3	789.6	804.9
47.5°	610.9	655.2	716.3	765.2	782.0
50°	572.7	620.1	688.8	740.7	757.5
52.5°	536.1	586.5	659.8	713.2	731.6
55°	496.4	551.3	630.8	685.7	705.6
57.5°	458.2	519.3	598.7	658.3	678.1
60°	416.9	482.6	569.7	627.7	649.1
62.5°	380.3	449.0	536.1	598.7	618.5
65°	339.1	413.9	504.0	566.6	586.5
67.5°	302.4	380.3	471.9	534.5	555.9
70°	262.7	342.1	436.8	502.5	520.8
72.5°	226.0	308.5	404.7	468.9	491.8
75°	187.9	273.4	371.1	436.8	456.7
77.5°	151.2	239.8	339.1	404.7	426.1
80°	114.5	207.7	307.0	371.1	392.5
82.5°	84.0	175.6	276.4	340.6	360.4
85°	55.0	149.7	247.4	311.6	332.9
87.5°	33.6	125.2	223.0	285.6	305.5
90°	16.1	114.2	227.4	287.4	306.1
92.5°	25.1	130.8	304.8	301.3	312.0
95°	38.8	149.3	473.2	346.0	338.6
97.5°	50.2	162.6	650.1	447.0	384.8
100°	69.2	172.8	752.5	658.3	497.8
102.5°	85.1	182.6	745.6	956.2	743.8
105°	100.2	191.6	693.9	1190.4	1057.3
107.5°	118.5	200.7	645.3	1267.4	1264.5
110°	135.2	210.2	610.3	1240.8	1341.9

TEST NUMBER: P998008

CATALOG NUMBER: SA2XXDIP-B1005D725UB40-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	151.9	220.3	582.9	1181.2	1329.7
115°	169.3	229.0	562.3	1109.0	1280.3
117.5°	186.1	239.2	545.6	1040.9	1211.8
120°	202.8	249.1	531.1	977.4	1147.2
122.5°	218.7	260.8	518.9	927.0	1077.3
125°	230.9	272.6	504.4	880.2	1020.3
127.5°	242.3	285.1	493.0	837.1	964.8
130°	252.1	297.6	482.3	795.3	916.9
132.5°	261.2	309.8	472.4	752.4	869.0
135°	268.8	320.4	464.0	710.2	818.1
137.5°	277.1	329.5	456.4	667.6	767.1
140°	287.0	336.4	449.5	628.8	714.7
142.5°	296.8	343.2	446.4	592.7	663.8
145°	305.2	350.8	444.9	561.6	621.2
147.5°	315.8	356.8	442.6	534.4	580.9
150°	326.5	363.0	440.4	516.3	548.9
152.5°	337.1	369.0	436.6	502.2	526.9
155°	347.0	374.7	432.0	488.6	507.9
157.5°	355.3	379.2	427.5	475.7	491.2
160°	363.7	383.8	422.9	462.8	475.3
162.5°	372.0	387.2	419.1	450.6	460.1
165°	378.1	389.5	413.8	438.8	445.7
167.5°	383.4	391.8	409.2	428.2	432.0
170°	388.7	393.0	405.4	418.4	419.9
172.5°	391.8	394.0	400.9	409.6	410.0
175°	394.1	394.5	397.8	402.8	401.6
177.5°	395.6	394.8	394.8	397.8	395.6
180°	394.8	394.8	394.8	394.8	394.8

TEST NUMBER: P998008

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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	15.23	16.17	16.15	17.12	18.35	18.31	19.25	19.23	20.20	21.42
	3H	16.70	17.55	17.63	18.51	19.76	20.90	21.75	21.83	22.71	23.96
	4H	17.18	17.99	18.12	18.95	20.21	22.16	22.97	23.10	23.93	25.19
	6H	17.47	18.22	18.42	19.18	20.45	23.46	24.21	24.42	25.18	26.45
	8H	17.53	18.24	18.49	19.23	20.50	24.12	24.84	25.08	25.82	27.09
	12H	17.55	18.23	18.52	19.21	20.50	24.85	25.53	25.82	26.51	27.81
4H	2H	16.29	17.10	17.24	18.06	19.32	18.65	19.46	19.60	20.42	21.68
	3H	18.01	18.69	18.97	19.68	20.96	21.44	22.13	22.40	23.12	24.39
	4H	18.63	19.26	19.60	20.25	21.54	22.86	23.50	23.83	24.48	25.78
	6H	19.05	19.60	20.03	20.61	21.90	24.34	24.89	25.32	25.89	27.19
	8H	19.16	19.68	20.14	20.68	21.99	25.09	25.61	26.08	26.61	27.92
	12H	19.21	19.68	20.21	20.70	22.01	25.93	26.40	26.93	27.42	28.73
8H	4H	19.43	19.94	20.41	20.95	22.26	23.01	23.53	24.00	24.53	25.84
	6H	20.06	20.50	21.07	21.54	22.85	24.65	25.08	25.65	26.12	27.43
	8H	20.29	20.67	21.30	21.70	23.03	25.54	25.93	26.55	26.95	28.28
	12H	20.42	20.77	21.44	21.79	23.16	26.53	26.88	27.56	27.90	29.27
12H	4H	19.63	20.10	20.63	21.12	22.43	22.99	23.46	24.00	24.48	25.80
	6H	20.40	20.79	21.41	21.81	23.14	24.67	25.06	25.69	26.09	27.41
	8H	20.71	21.05	21.73	22.07	23.44	25.60	25.95	26.63	26.97	28.34