

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: P998015

Luminaire Tested: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998015
REPORT IS A COMBINATION OF REPORTS P983752 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D725UB50-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

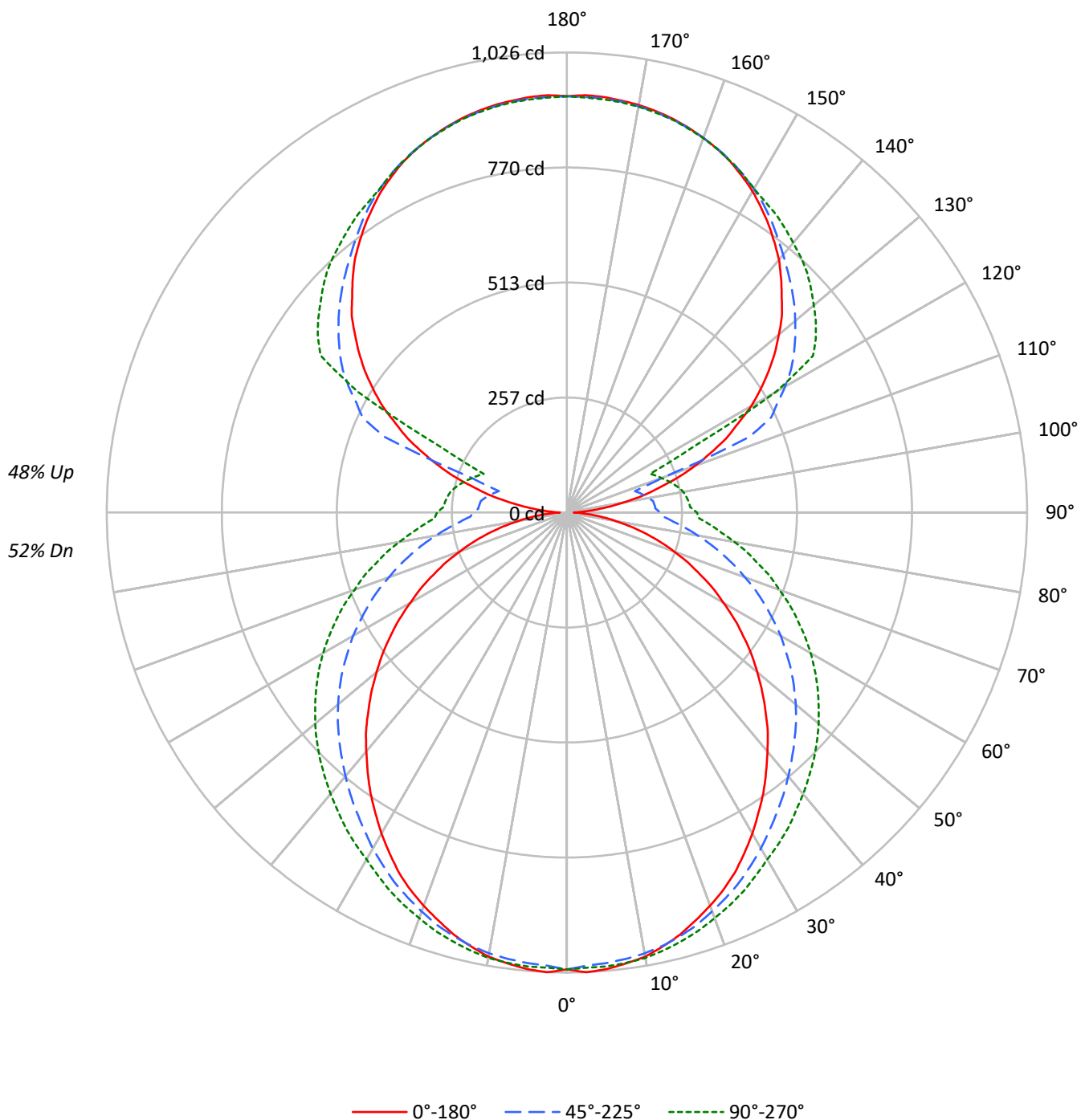
Lumens per Lamp: N/A
Luminaire Lumens: 6611.0 lumens
Efficiency: N/A
Efficacy: 80.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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

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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	58	58	58
1	97	92	87	83	89	85	81	77	72	69	66	60	58	56	49	47	46
2	87	79	72	67	80	73	67	62	62	58	54	52	48	45	42	40	38
3	79	69	61	55	73	64	57	51	54	49	44	45	41	38	37	34	31
4	72	61	52	46	66	56	49	43	48	42	37	40	36	32	33	29	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	27	24	26	23	20
7	56	43	35	29	52	40	33	28	35	29	24	29	24	21	24	20	18
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16
9	49	36	28	23	45	33	26	22	29	23	19	24	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°	16130	16130	16130
5°	16202	15441	15354
10°	16094	14906	14688
15°	15867	14353	14006
20°	15580	13772	13358
25°	15298	13216	12771
30°	14901	12651	12190
35°	14500	12105	11764
40°	14078	11634	11339
45°	13674	11207	10970
50°	13243	10813	10604
55°	12787	10395	10233
60°	12235	9958	9842
65°	11653	9457	9392
70°	11000	8921	8909
75°	10159	8383	8452
80°	8846	7821	7978
85°	7515	7294	7570

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 13674 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.6	1.5
10°-20°	277.0	4.2
20°-30°	419.8	6.3
30°-40°	511.2	7.7
40°-50°	550.0	8.3
50°-60°	534.1	8.1
60°-70°	466.4	7.1
70°-80°	359.0	5.4
80°-90°	242.1	3.7
90°-100°	196.5	3.0
100°-110°	235.2	3.6
110°-120°	382.6	5.8
120°-130°	546.5	8.3
130°-140°	551.9	8.3
140°-150°	498.7	7.5
150°-160°	398.4	6.0
160°-170°	256.7	3.9
170°-180°	88.4	1.3
0°-30°	793.4	12.0
0°-40°	1304.6	19.7
0°-60°	2388.7	36.1
0°-90°	3456.2	52.3
90°-120°	814.3	12.3
90°-150°	2411.4	36.5
90°-180°	3155.0	47.7
0°-180°	6611.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1019	1019	1019	1019	1019	
5°	1022	1018	1009	1018	1016	97
15°	975	978	978	991	989	275
25°	886	896	910	927	932	407
35°	764	789	817	849	860	477
45°	626	666	718	764	778	483
55°	480	533	610	663	682	429
65°	328	400	487	548	567	326
75°	182	264	359	422	442	192
85°	53	145	239	301	322	56
90°	16	108	208	271	290	13
95°	56	103	196	256	273	61
105°	212	274	168	227	246	227
115°	392	420	503	236	204	385
125°	549	558	618	662	678	490
135°	677	688	709	746	757	524
145°	784	783	795	808	812	491
155°	863	857	865	869	864	398
165°	910	905	907	912	907	257
175°	930	926	927	932	925	89
180°	928	928	928	928	928	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1019.0	1019.0	1019.0	1019.0	1019.0
2.5°	1026.3	1021.9	1011.6	1019.0	1016.0
5°	1021.9	1017.5	1008.6	1017.5	1016.0
7.5°	1014.5	1011.6	1004.2	1014.5	1013.1
10°	1005.7	1002.7	998.3	1010.1	1008.6
12.5°	990.9	992.4	989.4	1001.2	999.8
15°	974.7	977.6	977.6	990.9	989.4
17.5°	954.0	959.9	964.3	977.6	977.6
20°	933.3	940.7	946.6	962.8	962.8
22.5°	911.2	920.0	928.9	945.1	948.1
25°	886.1	896.4	909.7	927.4	931.8
27.5°	856.5	872.8	887.5	909.7	912.6
30°	827.0	846.2	865.4	889.0	893.4
32.5°	794.5	816.6	840.3	868.3	877.2
35°	763.5	788.6	816.6	849.1	859.5
37.5°	729.5	757.6	793.0	828.5	838.8
40°	695.6	728.0	767.9	806.3	819.6
42.5°	663.1	695.6	742.8	785.6	798.9
45°	626.1	666.0	717.7	763.5	778.3
47.5°	590.7	633.5	692.6	739.9	756.1
50°	553.8	599.6	666.0	716.2	732.5
52.5°	518.3	567.1	638.0	689.6	707.4
55°	479.9	533.1	609.9	663.1	682.3
57.5°	443.0	502.1	578.9	636.5	655.7
60°	403.2	466.7	550.8	606.9	627.6
62.5°	367.7	434.2	518.3	578.9	598.1
65°	327.8	400.2	487.3	547.9	567.1
67.5°	292.4	367.7	456.3	516.9	537.5
70°	254.0	330.8	422.4	485.9	503.6
72.5°	218.6	298.3	391.3	453.4	475.5
75°	181.6	264.3	358.9	422.4	441.6
77.5°	146.2	231.9	327.8	391.3	412.0
80°	110.8	200.8	296.8	358.9	379.5
82.5°	81.2	169.8	267.3	329.3	348.5
85°	53.2	144.7	239.2	301.3	321.9
87.5°	32.5	121.1	215.6	276.2	295.4
90°	15.5	108.5	208.3	270.8	289.8
92.5°	30.1	105.7	197.7	256.7	275.1
95°	55.5	102.7	196.0	255.5	272.6
97.5°	88.9	97.3	193.8	250.4	268.8
100°	129.2	91.9	186.0	246.0	263.6
102.5°	172.1	219.5	176.9	237.5	255.7
105°	211.6	274.5	168.0	227.1	245.9
107.5°	259.3	311.5	159.0	216.6	235.5
110°	303.5	347.1	225.3	205.5	224.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	346.4	382.1	438.7	196.4	214.7
115°	392.1	419.8	503.0	236.3	204.3
117.5°	430.2	455.5	529.0	477.3	316.0
120°	474.6	490.6	561.7	611.2	536.7
122.5°	512.2	524.4	592.5	636.4	650.4
125°	549.1	557.8	617.8	662.4	677.7
127.5°	584.0	591.9	641.8	685.5	699.5
130°	616.9	626.2	664.6	707.3	718.5
132.5°	650.5	657.7	687.2	727.3	738.4
135°	677.2	688.0	708.7	746.5	757.0
137.5°	706.8	714.8	728.9	763.7	772.1
140°	735.7	739.5	749.9	779.6	785.0
142.5°	759.8	763.0	771.8	794.8	798.9
145°	783.9	783.2	794.6	808.2	812.1
147.5°	806.0	804.0	815.4	820.3	822.0
150°	827.5	822.8	833.6	837.6	834.2
152.5°	845.7	840.3	850.4	854.4	849.7
155°	863.1	857.1	865.1	869.2	863.8
157.5°	877.2	871.8	877.9	882.6	877.2
160°	889.3	885.3	889.3	893.3	888.6
162.5°	900.1	896.0	899.4	904.1	898.0
165°	909.5	905.4	907.4	912.2	907.4
167.5°	916.9	912.8	914.8	919.5	913.5
170°	922.9	918.9	920.2	924.9	918.9
172.5°	926.9	922.9	924.2	928.9	922.9
175°	930.3	925.6	926.9	931.6	924.9
177.5°	931.6	926.9	927.6	932.3	926.3
180°	928.3	928.3	928.3	928.3	928.3

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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	15.07	16.01	16.00	16.96	18.20	18.15	19.08	19.08	20.04	21.27
	3H	16.54	17.39	17.48	18.35	19.60	20.74	21.59	21.68	22.55	23.81
	4H	17.02	17.82	17.97	18.79	20.05	22.00	22.80	22.95	23.77	25.03
	6H	17.31	18.05	18.27	19.02	20.30	23.30	24.05	24.26	25.02	26.29
	8H	17.37	18.08	18.34	19.07	20.34	23.96	24.67	24.93	25.66	26.94
	12H	17.39	18.07	18.36	19.05	20.35	24.69	25.37	25.66	26.35	27.65
4H	2H	16.13	16.94	17.09	17.90	19.17	18.49	19.29	19.44	20.26	21.52
	3H	17.85	18.53	18.81	19.52	20.80	21.28	21.97	22.25	22.96	24.24
	4H	18.47	19.10	19.44	20.09	21.39	22.70	23.33	23.68	24.32	25.62
	6H	18.89	19.44	19.88	20.45	21.75	24.18	24.72	25.16	25.74	27.03
	8H	19.00	19.52	19.99	20.52	21.84	24.93	25.45	25.92	26.45	27.77
	12H	19.05	19.52	20.06	20.54	21.86	25.77	26.24	26.77	27.26	28.58
8H	4H	19.27	19.78	20.25	20.79	22.10	22.85	23.37	23.84	24.37	25.69
	6H	19.90	20.34	20.91	21.38	22.69	24.49	24.92	25.50	25.96	27.28
	8H	20.13	20.51	21.15	21.54	22.87	25.38	25.76	26.40	26.79	28.12
	12H	20.26	20.60	21.29	21.63	23.01	26.37	26.72	27.40	27.74	29.12
12H	4H	19.47	19.94	20.48	20.96	22.28	22.83	23.30	23.84	24.32	25.64
	6H	20.24	20.62	21.26	21.66	22.99	24.51	24.90	25.53	25.93	27.26
	8H	20.55	20.89	21.57	21.91	23.29	25.44	25.79	26.47	26.81	28.19