

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: P998609

Luminaire Tested: SA2XXDIP-B485D725UB50-4F0-XX-W2A-D

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998609
REPORT IS A COMBINATION OF REPORTS P984352 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D725UB50-4F0-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

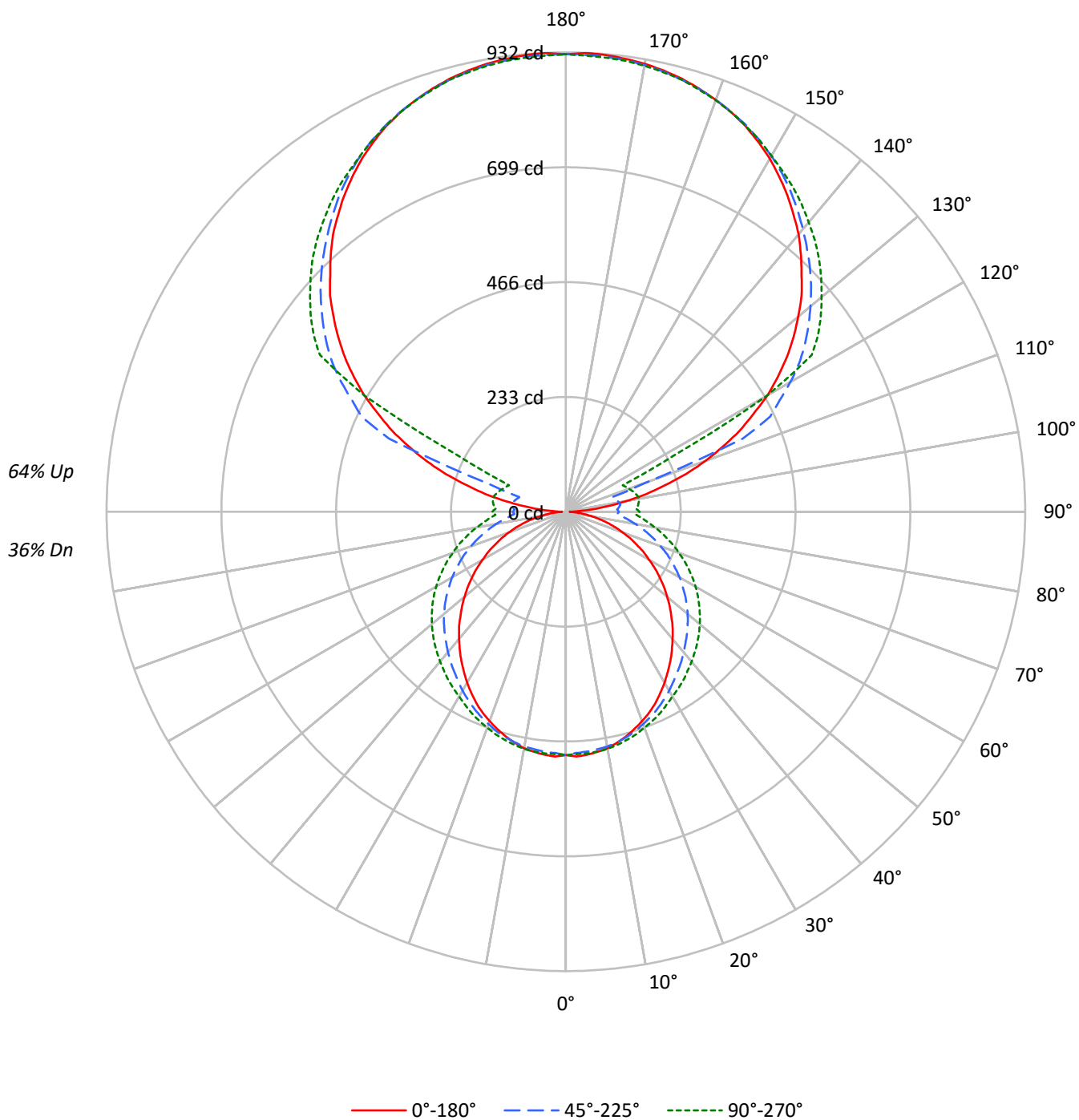
Lumens per Lamp: N/A
Luminaire Lumens: 4606.0 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 45.1
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: P998609

CATALOG NUMBER: SA2XXDIP-B485D725UB50-4F0-XX-W2A-D

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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44
1	94	89	85	81	84	80	77	74	65	62	60	50	48	47	37	36	35
2	85	77	71	65	76	70	64	59	56	52	49	43	41	38	32	30	28
3	77	67	60	54	69	61	54	49	49	44	40	38	35	32	28	26	24
4	70	59	51	45	63	54	47	41	43	38	34	34	30	27	25	22	20
5	64	53	44	38	58	48	40	35	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	35	30	35	29	25	27	23	20	20	17	15
7	55	42	34	29	49	38	31	26	31	26	22	24	20	18	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	17	14	12
9	47	35	27	22	42	32	25	20	26	21	17	20	17	14	15	13	11
10	44	32	24	20	39	29	23	18	24	19	15	19	15	12	14	11	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7812	7812	7812
5°	7847	7478	7437
10°	7795	7220	7114
15°	7684	6952	6784
20°	7545	6669	6470
25°	7408	6401	6186
30°	7216	6127	5904
35°	7023	5863	5698
40°	6819	5635	5491
45°	6622	5428	5312
50°	6414	5238	5135
55°	6193	5035	4955
60°	5926	4824	4767
65°	5645	4580	4548
70°	5327	4319	4315
75°	4923	4060	4092
80°	4279	3789	3864
85°	3630	3534	3666

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6622 cd/sqm

TEST NUMBER: P998609

CATALOG NUMBER: SA2XXDIP-B485D725UB50-4F0-XX-W2A-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	1.0
10°-20°	134.2	2.9
20°-30°	203.3	4.4
30°-40°	247.6	5.4
40°-50°	266.4	5.8
50°-60°	258.7	5.6
60°-70°	225.9	4.9
70°-80°	173.9	3.8
80°-90°	118.1	2.6
90°-100°	111.0	2.4
100°-110°	172.8	3.8
110°-120°	341.4	7.4
120°-130°	523.5	11.4
130°-140°	542.2	11.8
140°-150°	497.0	10.8
150°-160°	398.4	8.6
160°-170°	256.7	5.6
170°-180°	88.4	1.9
0°-30°	384.3	8.3
0°-40°	631.8	13.7
0°-60°	1156.9	25.1
0°-90°	1674.7	36.4
90°-120°	625.1	13.6
90°-150°	2187.8	47.5
90°-180°	2931.0	63.6
0°-180°	4606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	494	494	494	494	494	
5°	495	493	488	493	492	47
15°	472	474	474	480	479	133
25°	429	434	441	449	451	197
35°	370	382	396	411	416	231
45°	303	323	348	370	377	234
55°	232	258	295	321	330	208
65°	159	194	236	265	275	158
75°	88	128	174	204	214	93
85°	26	70	116	146	156	27
90°	8	57	108	140	150	7
95°	49	61	108	139	147	56
105°	208	249	102	135	145	222
115°	389	408	457	168	127	383
125°	548	556	592	616	624	489
135°	676	687	700	722	726	523
145°	784	783	795	804	804	490
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	

TEST NUMBER: P998609

CATALOG NUMBER: SA2XXDIP-B485D725UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	493.5	493.5	493.5	493.5	493.5
2.5°	497.1	494.9	489.9	493.5	492.1
5°	494.9	492.8	488.5	492.8	492.1
7.5°	491.3	489.9	486.3	491.3	490.6
10°	487.1	485.6	483.5	489.2	488.5
12.5°	479.9	480.6	479.2	484.9	484.2
15°	472.0	473.5	473.5	479.9	479.2
17.5°	462.0	464.9	467.0	473.5	473.5
20°	452.0	455.6	458.4	466.3	466.3
22.5°	441.3	445.6	449.9	457.7	459.2
25°	429.1	434.1	440.6	449.2	451.3
27.5°	414.8	422.7	429.8	440.6	442.0
30°	400.5	409.8	419.1	430.6	432.7
32.5°	384.8	395.5	407.0	420.5	424.8
35°	369.8	381.9	395.5	411.2	416.3
37.5°	353.3	366.9	384.1	401.2	406.2
40°	336.9	352.6	371.9	390.5	396.9
42.5°	321.1	336.9	359.7	380.5	386.9
45°	303.2	322.6	347.6	369.8	376.9
47.5°	286.1	306.8	335.4	358.3	366.2
50°	268.2	290.4	322.6	346.9	354.7
52.5°	251.0	274.6	309.0	334.0	342.6
55°	232.4	258.2	295.4	321.1	330.4
57.5°	214.6	243.2	280.4	308.3	317.6
60°	195.3	226.0	266.8	294.0	304.0
62.5°	178.1	210.3	251.0	280.4	289.7
65°	158.8	193.8	236.0	265.3	274.6
67.5°	141.6	178.1	221.0	250.3	260.3
70°	123.0	160.2	204.5	235.3	243.9
72.5°	105.9	144.5	189.5	219.6	230.3
75°	88.0	128.0	173.8	204.5	213.8
77.5°	70.8	112.3	158.8	189.5	199.5
80°	53.6	97.3	143.8	173.8	183.8
82.5°	39.3	82.2	129.5	159.5	168.8
85°	25.7	70.1	115.9	145.9	155.9
87.5°	15.7	58.6	104.4	133.7	143.0
90°	7.9	56.7	107.8	139.8	149.7
92.5°	23.2	58.4	104.1	133.4	142.5
95°	49.4	60.8	108.4	139.0	146.9
97.5°	83.6	59.3	111.5	140.0	149.2
100°	123.9	58.4	109.8	141.7	150.9
102.5°	167.5	189.8	106.1	139.3	149.1
105°	207.8	248.6	102.5	134.9	145.4
107.5°	255.5	289.4	98.8	130.5	141.1
110°	300.5	328.9	169.7	125.5	136.1

TEST NUMBER: P998609

CATALOG NUMBER: SA2XXDIP-B485D725UB50-4F0-XX-W2A-D

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	343.4	366.9	388.4	121.8	131.7
115°	389.1	408.3	457.3	167.8	127.3
117.5°	427.9	447.2	488.6	414.1	245.2
120°	472.3	485.3	525.9	554.0	471.2
122.5°	509.9	521.4	561.3	584.6	591.8
125°	547.5	556.2	591.9	615.9	624.4
127.5°	582.4	591.1	620.5	645.1	652.2
130°	615.3	625.4	647.8	672.3	677.4
132.5°	648.9	656.9	675.0	697.6	702.6
135°	676.4	687.2	700.4	722.1	726.5
137.5°	706.0	714.0	724.3	744.7	747.7
140°	734.9	739.5	748.3	765.9	766.8
142.5°	759.0	763.0	771.8	785.7	786.0
145°	783.9	783.2	794.6	803.6	803.8
147.5°	806.0	804.0	815.4	819.5	819.0
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	10.96	11.74	12.02	12.81	14.26	14.04	14.82	15.09	15.89	17.34
	3H	12.42	13.12	13.48	14.20	15.67	16.62	17.33	17.68	18.40	19.87
	4H	12.89	13.56	13.96	14.64	16.11	17.87	18.54	18.95	19.62	21.09
	6H	13.17	13.79	14.25	14.87	16.36	19.16	19.78	20.25	20.86	22.35
	8H	13.23	13.82	14.32	14.92	16.40	19.82	20.41	20.91	21.51	22.99
	12H	13.24	13.80	14.33	14.89	16.40	20.54	21.11	21.64	22.20	23.70
4H	2H	12.00	12.68	13.09	13.75	15.23	14.36	15.03	15.44	16.11	17.58
	3H	13.70	14.27	14.79	15.38	16.86	17.14	17.71	18.23	18.81	20.30
	4H	14.32	14.85	15.42	15.94	17.45	18.56	19.08	19.65	20.17	21.68
	6H	14.73	15.19	15.84	16.31	17.80	20.02	20.47	21.12	21.59	23.09
	8H	14.84	15.27	15.94	16.38	17.89	20.77	21.20	21.88	22.31	23.83
	12H	14.88	15.27	16.00	16.39	17.91	21.60	21.99	22.72	23.11	24.63
8H	4H	15.11	15.53	16.21	16.64	18.16	18.69	19.12	19.80	20.23	21.75
	6H	15.74	16.09	16.86	17.24	18.76	20.32	20.68	21.44	21.83	23.34
	8H	15.96	16.27	17.09	17.40	18.94	21.21	21.52	22.34	22.65	24.19
	12H	16.09	16.37	17.22	17.49	19.06	22.20	22.48	23.33	23.60	25.17
12H	4H	15.30	15.69	16.42	16.81	18.33	18.66	19.05	19.78	20.17	21.70
	6H	16.07	16.39	17.20	17.52	19.05	20.34	20.66	21.47	21.79	23.32
	8H	16.37	16.65	17.51	17.78	19.34	21.27	21.55	22.40	22.67	24.24