

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: P998584

Luminaire Tested: SA2XXDIP-B485D725UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998584
REPORT IS A COMBINATION OF REPORTS P984327 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D725UB30-4F0-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

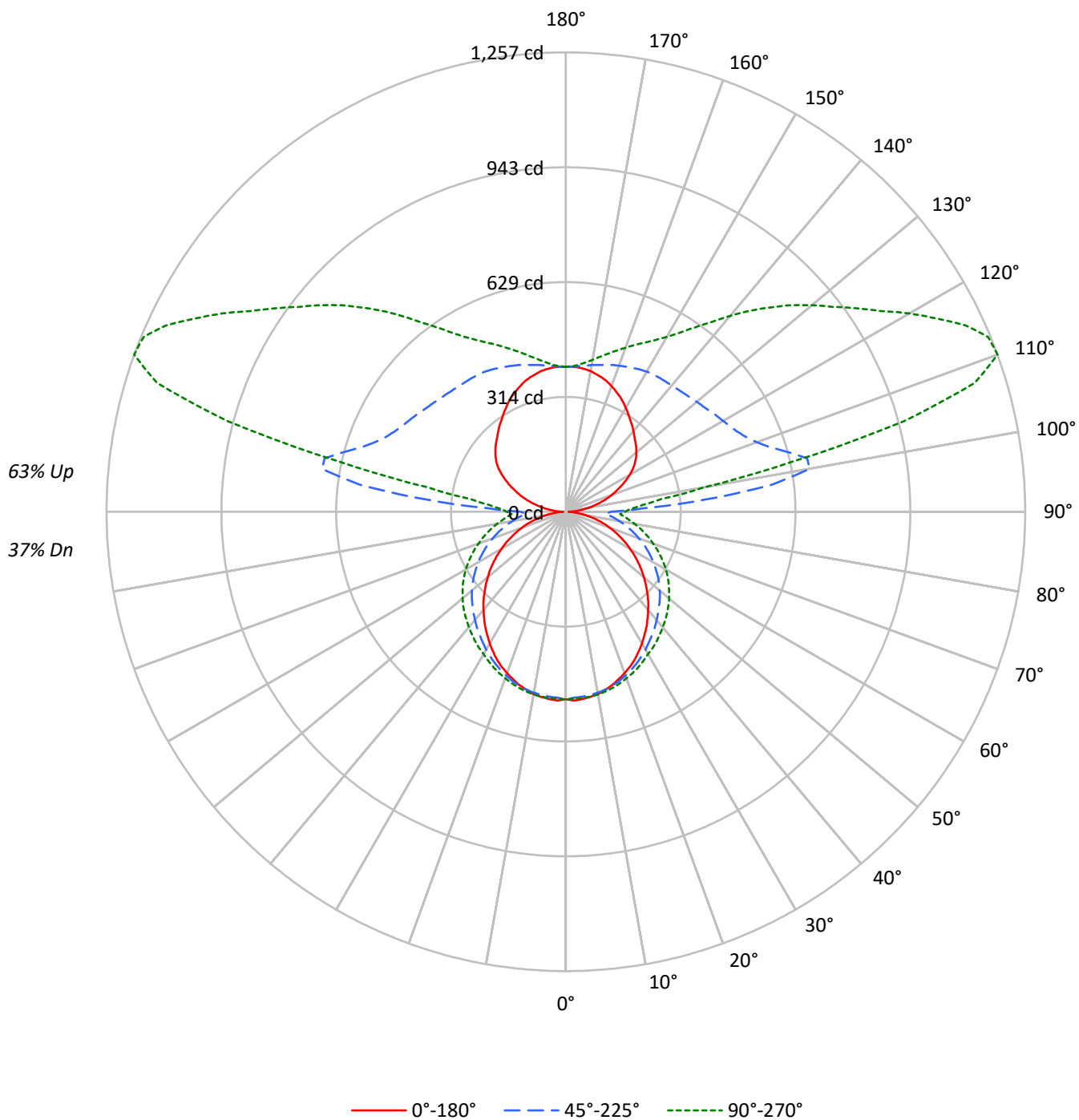
Lumens per Lamp: N/A
Luminaire Lumens: 4728.2 lumens
Efficiency: N/A
Efficacy: 104.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

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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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37		
1	94	89	85	81	85	81	77	74	65	62	60	50	49	47	37	36	35	29		
2	85	77	71	65	76	70	64	60	56	52	49	44	41	38	32	30	29	23		
3	77	67	60	54	69	61	54	49	49	44	40	38	35	32	28	26	24	19		
4	70	59	51	45	63	54	47	41	43	38	34	34	30	27	25	22	20	16		
5	64	53	44	38	58	48	41	35	39	33	29	30	26	23	22	20	17	14		
6	59	47	39	33	53	43	35	30	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	25	21	18	18	15	13	11		
8	51	38	30	25	46	35	28	23	28	23	19	22	18	16	17	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	17	14	15	13	11	8		
10	44	32	25	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8122	8122	8122
5°	8159	7775	7733
10°	8105	7506	7397
15°	7990	7228	7054
20°	7846	6935	6728
25°	7703	6655	6432
30°	7505	6371	6139
35°	7302	6097	5924
40°	7090	5859	5711
45°	6886	5643	5524
50°	6669	5445	5341
55°	6440	5234	5153
60°	6160	5015	4957
65°	5869	4763	4730
70°	5539	4492	4486
75°	5119	4221	4257
80°	4455	3940	4018
85°	3786	3674	3812

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6886 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.6	1.0
10°-20°	139.5	3.0
20°-30°	211.4	4.5
30°-40°	257.4	5.4
40°-50°	277.0	5.9
50°-60°	269.0	5.7
60°-70°	234.9	5.0
70°-80°	180.8	3.8
80°-90°	123.6	2.6
90°-100°	244.5	5.2
100°-110°	605.0	12.8
110°-120°	612.1	12.9
120°-130°	492.7	10.4
130°-140°	387.3	8.2
140°-150°	287.0	6.1
150°-160°	200.7	4.2
160°-170°	118.2	2.5
170°-180°	38.4	0.8
0°-30°	399.6	8.5
0°-40°	657.0	13.9
0°-60°	1202.9	25.4
0°-90°	1742.2	36.8
90°-120°	1461.6	30.9
90°-150°	2628.7	55.6
90°-180°	2986.0	63.2
0°-180°	4728.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	513	513	513	513	513	
5°	515	512	508	512	512	49
15°	491	492	492	499	498	138
25°	446	451	458	467	469	205
35°	384	397	411	428	433	240
45°	315	335	361	384	392	243
55°	242	268	307	334	344	216
65°	165	202	245	276	286	164
75°	92	133	181	213	222	97
85°	27	73	120	152	162	28
90°	8	61	124	153	162	7
95°	33	107	385	227	210	32
105°	97	166	630	1101	958	103
115°	167	218	518	1044	1207	165
125°	230	272	480	837	970	205
135°	269	321	458	689	791	208
145°	307	353	447	560	616	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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	513.1	513.1	513.1	513.1	513.1
2.5°	516.9	514.6	509.4	513.1	511.7
5°	514.6	512.4	507.9	512.4	511.7
7.5°	510.9	509.4	505.7	510.9	510.2
10°	506.5	505.0	502.7	508.7	507.9
12.5°	499.0	499.8	498.3	504.2	503.5
15°	490.8	492.3	492.3	499.0	498.3
17.5°	480.4	483.4	485.6	492.3	492.3
20°	470.0	473.7	476.7	484.9	484.9
22.5°	458.9	463.3	467.8	476.0	477.5
25°	446.2	451.4	458.1	467.0	469.3
27.5°	431.3	439.5	447.0	458.1	459.6
30°	416.5	426.1	435.8	447.7	449.9
32.5°	400.1	411.3	423.2	437.3	441.8
35°	384.5	397.1	411.3	427.6	432.8
37.5°	367.4	381.5	399.4	417.2	422.4
40°	350.3	366.6	386.7	406.1	412.8
42.5°	333.9	350.3	374.1	395.6	402.3
45°	315.3	335.4	361.4	384.5	391.9
47.5°	297.5	319.0	348.8	372.6	380.8
50°	278.9	301.9	335.4	360.7	368.9
52.5°	261.0	285.6	321.3	347.3	356.2
55°	241.7	268.5	307.1	333.9	343.6
57.5°	223.1	252.9	291.5	320.5	330.2
60°	203.0	235.0	277.4	305.7	316.1
62.5°	185.2	218.6	261.0	291.5	301.2
65°	165.1	201.5	245.4	275.9	285.6
67.5°	147.3	185.2	229.8	260.3	270.7
70°	127.9	166.6	212.7	244.7	253.6
72.5°	110.1	150.2	197.1	228.3	239.5
75°	91.5	133.1	180.7	212.7	222.4
77.5°	73.6	116.8	165.1	197.1	207.5
80°	55.8	101.1	149.5	180.7	191.1
82.5°	40.9	85.5	134.6	165.8	175.5
85°	26.8	72.9	120.5	151.7	162.1
87.5°	16.4	61.0	108.6	139.1	148.7
90°	8.2	61.0	124.2	152.7	162.0
92.5°	18.2	82.4	209.1	174.7	176.0
95°	32.6	106.6	384.7	226.8	209.7
97.5°	44.9	123.8	568.1	334.5	262.6
100°	64.0	138.8	677.5	553.4	383.4
102.5°	80.8	152.7	676.1	859.3	636.9
105°	96.8	165.8	629.7	1101.1	958.5
107.5°	115.2	178.8	586.3	1184.8	1173.2
110°	132.8	192.2	555.8	1164.4	1257.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	149.6	205.8	533.9	1110.0	1250.6
115°	167.1	218.5	517.9	1043.6	1207.2
117.5°	184.6	231.9	506.6	980.8	1144.8
120°	201.4	244.9	496.8	923.4	1085.4
122.5°	217.5	259.1	489.3	878.1	1022.2
125°	230.5	272.5	480.3	836.6	970.5
127.5°	242.0	285.8	473.5	799.8	920.9
130°	251.9	298.4	467.6	763.2	879.2
132.5°	261.1	310.6	462.3	725.6	836.6
135°	269.4	321.3	457.8	688.7	790.8
137.5°	277.8	330.5	454.1	651.4	746.0
140°	287.7	338.2	450.4	618.0	699.5
142.5°	297.7	345.0	448.9	586.4	653.8
145°	306.9	352.7	447.3	559.8	615.9
147.5°	317.6	358.8	445.1	536.6	580.9
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	11.15	11.94	12.20	13.00	14.45	14.22	15.01	15.28	16.08	17.52
	3H	12.61	13.32	13.67	14.39	15.85	16.81	17.52	17.87	18.59	20.05
	4H	13.08	13.76	14.15	14.83	16.30	18.06	18.74	19.13	19.81	21.28
	6H	13.36	13.99	14.44	15.06	16.54	19.35	19.98	20.44	21.06	22.54
	8H	13.42	14.01	14.50	15.11	16.58	20.01	20.61	21.10	21.70	23.18
	12H	13.43	14.00	14.52	15.09	16.59	20.73	21.30	21.82	22.39	23.89
4H	2H	12.19	12.87	13.27	13.94	15.41	14.55	15.22	15.63	16.30	17.77
	3H	13.90	14.47	14.98	15.57	17.05	17.33	17.90	18.42	19.01	20.49
	4H	14.51	15.04	15.61	16.13	17.63	18.75	19.27	19.84	20.37	21.87
	6H	14.93	15.38	16.03	16.50	17.99	20.21	20.67	21.31	21.78	23.28
	8H	15.03	15.46	16.13	16.57	18.08	20.97	21.39	22.07	22.50	24.01
	12H	15.07	15.46	16.19	16.58	18.10	21.79	22.18	22.91	23.30	24.82
8H	4H	15.30	15.73	16.40	16.83	18.34	18.89	19.31	19.98	20.42	21.93
	6H	15.93	16.29	17.05	17.43	18.94	20.51	20.87	21.63	22.02	23.52
	8H	16.15	16.47	17.28	17.59	19.12	21.40	21.72	22.53	22.84	24.37
	12H	16.28	16.56	17.41	17.68	19.25	22.39	22.67	23.52	23.80	25.36
12H	4H	15.49	15.88	16.61	17.00	18.52	18.86	19.25	19.97	20.36	21.88
	6H	16.26	16.58	17.39	17.71	19.23	20.54	20.85	21.66	21.98	23.51
	8H	16.56	16.84	17.69	17.97	19.53	21.46	21.74	22.59	22.87	24.43