

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: P998490

Luminaire Tested: SA2XXDIP-B485D330UB50-4F0-XX-W2A-D1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P998490
REPORT IS A COMBINATION OF REPORTS P984233 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D330UB50-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

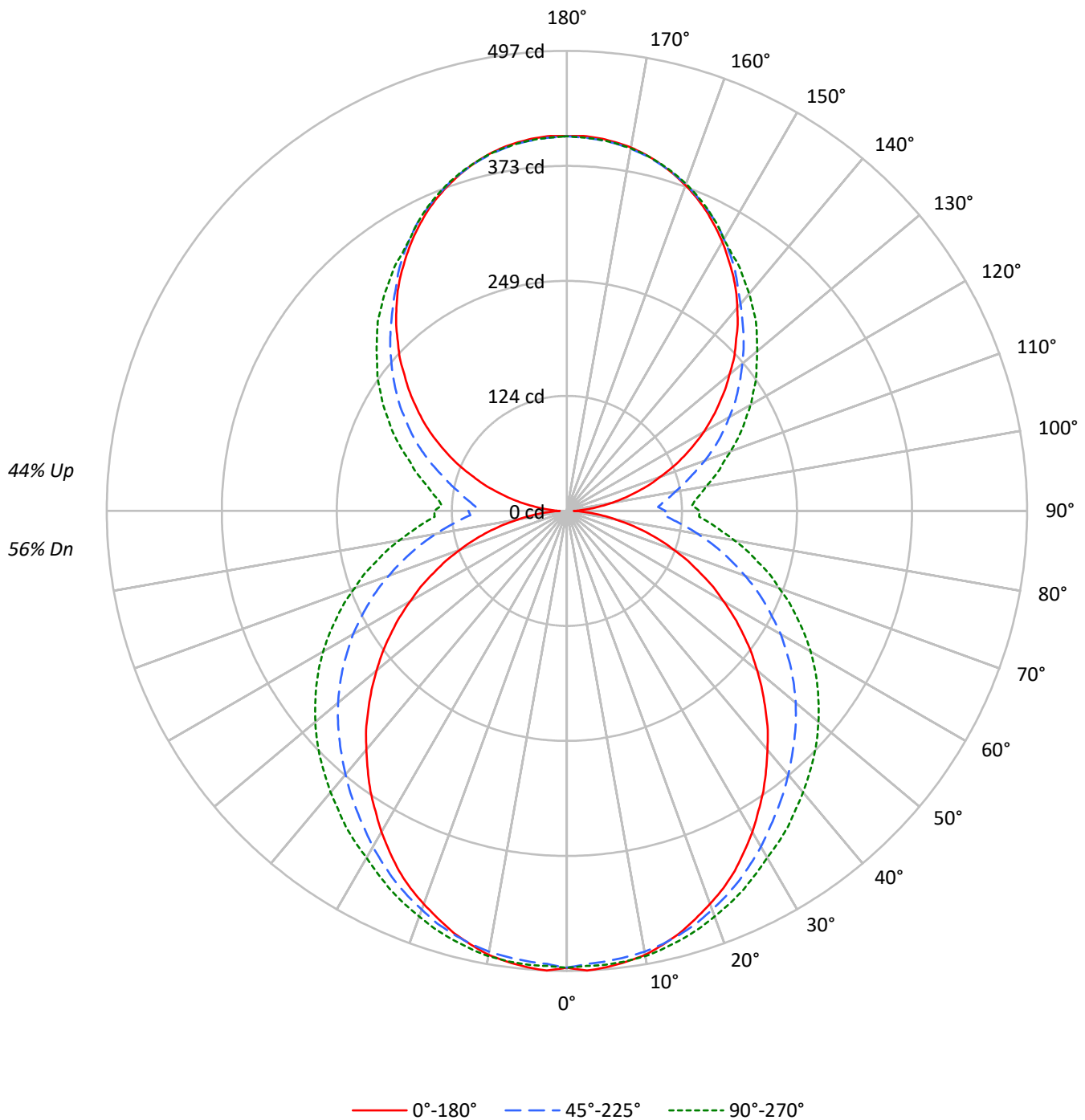
Lumens per Lamp: N/A
Luminaire Lumens: 3016.0 lumens
Efficiency: N/A
Efficacy: 90.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 33.3
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	101	101	101	101	86	86	86	73	73	73	61	61	61
1	97	92	88	84	90	86	82	78	73	70	68	62	60	58	51	50	48
2	88	80	73	67	81	74	68	63	63	59	55	53	50	47	44	42	39
3	80	69	61	55	74	65	57	52	55	50	45	47	42	39	39	36	33
4	73	61	53	46	67	57	49	43	49	43	38	41	37	33	34	31	28
5	67	54	46	39	61	51	43	37	43	37	33	37	32	28	31	27	24
6	61	49	40	34	57	45	38	32	39	33	28	33	28	25	28	24	21
7	57	44	35	29	52	41	33	28	35	29	25	30	25	22	25	21	18
8	53	40	32	26	49	37	30	25	32	26	22	28	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	24	19	25	21	17	21	18	15
10	46	33	26	21	42	31	24	20	27	21	17	23	19	15	20	16	13

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

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.8	1.6
10°-20°	134.2	4.4
20°-30°	203.3	6.7
30°-40°	247.6	8.2
40°-50°	266.4	8.8
50°-60°	258.7	8.6
60°-70°	225.9	7.5
70°-80°	173.9	5.8
80°-90°	117.6	3.9
90°-100°	105.4	3.5
100°-110°	138.3	4.6
110°-120°	175.0	5.8
120°-130°	200.7	6.7
130°-140°	210.2	7.0
140°-150°	198.7	6.6
150°-160°	165.4	5.5
160°-170°	109.7	3.6
170°-180°	38.3	1.3
0°-30°	384.3	12.7
0°-40°	631.8	20.9
0°-60°	1156.9	38.4
0°-90°	1674.2	55.5
90°-120°	418.6	13.9
90°-150°	1028.3	34.1
90°-180°	1342.0	44.5
0°-180°	3016.0	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	53	106	134	143	6
95°	24	60	104	131	139	24
105°	77	99	137	162	170	82
115°	140	149	181	202	209	138
125°	200	203	225	244	250	179
135°	258	262	270	284	289	200
145°	312	315	317	321	324	195
155°	357	358	359	361	360	164
165°	388	388	388	390	389	110
175°	404	403	402	405	403	38
180°	405	405	405	405	405	

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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°	7.5	53.0	106.4	134.3	143.2
92.5°	13.9	54.5	98.6	126.8	135.3
95°	23.5	60.5	104.1	131.3	139.2
97.5°	34.7	68.6	111.4	137.9	146.5
100°	48.4	77.6	118.6	145.1	152.7
102.5°	62.0	87.7	127.7	153.8	161.3
105°	77.1	98.8	136.7	162.3	170.2
107.5°	92.8	111.2	147.0	171.7	177.9
110°	107.1	123.4	158.4	181.3	188.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	123.5	136.9	169.5	191.4	198.6
115°	139.6	149.4	180.9	202.1	208.9
117.5°	154.8	163.3	191.6	212.1	218.2
120°	170.9	176.5	202.4	222.4	229.2
122.5°	185.6	189.8	214.5	232.7	238.6
125°	200.2	203.3	225.2	243.5	249.6
127.5°	215.3	218.3	236.3	252.8	258.2
130°	229.3	233.0	247.3	263.8	268.2
132.5°	245.0	247.7	258.7	273.5	278.2
135°	258.0	261.7	269.6	284.3	288.9
137.5°	273.0	276.1	280.3	293.6	297.2
140°	286.3	288.7	291.8	303.3	306.2
142.5°	300.0	302.3	303.4	312.3	314.5
145°	312.3	314.6	316.7	321.3	323.6
147.5°	323.9	326.9	328.3	329.7	330.5
150°	335.8	337.9	339.2	340.3	339.2
152.5°	346.4	348.5	350.2	351.5	350.2
155°	357.0	358.0	359.1	360.8	359.7
157.5°	366.2	366.9	367.6	370.0	368.3
160°	374.4	375.1	375.5	377.5	376.1
162.5°	381.9	381.9	382.3	384.7	383.0
165°	388.4	388.1	388.1	390.5	388.8
167.5°	394.2	393.2	393.2	395.6	393.9
170°	398.7	397.7	397.3	399.7	397.7
172.5°	401.8	400.7	400.4	402.8	400.7
175°	404.2	403.1	402.4	404.8	402.8
177.5°	405.5	404.5	403.8	405.9	403.8
180°	404.8	404.8	404.8	404.8	404.8

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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	12.84	13.81	13.73	14.73	15.92	15.91	16.88	16.81	17.81	18.99
	3H	14.30	15.18	15.21	16.12	17.33	18.51	19.39	19.41	20.32	21.53
	4H	14.78	15.62	15.70	16.56	17.78	19.76	20.60	20.68	21.54	22.76
	6H	15.07	15.85	16.01	16.79	18.02	21.06	21.84	22.00	22.78	24.02
	8H	15.13	15.87	16.07	16.84	18.07	21.73	22.47	22.67	23.43	24.66
	12H	15.15	15.86	16.10	16.82	18.07	22.46	23.16	23.40	24.12	25.38
4H	2H	13.90	14.73	14.82	15.67	16.89	16.25	17.09	17.18	18.03	19.24
	3H	15.61	16.32	16.55	17.29	18.52	19.05	19.76	19.99	20.73	21.96
	4H	16.24	16.89	17.19	17.85	19.11	20.47	21.12	21.42	22.09	23.34
	6H	16.66	17.23	17.62	18.22	19.47	21.94	22.52	22.90	23.50	24.76
	8H	16.77	17.31	17.73	18.29	19.56	22.70	23.24	23.67	24.22	25.49
	12H	16.82	17.31	17.80	18.30	19.58	23.54	24.03	24.52	25.02	26.30
8H	4H	17.04	17.57	18.00	18.55	19.82	20.62	21.16	21.58	22.14	23.41
	6H	17.67	18.13	18.66	19.15	20.42	22.26	22.71	23.24	23.73	25.00
	8H	17.90	18.30	18.89	19.31	20.59	23.15	23.55	24.14	24.56	25.85
	12H	18.04	18.39	19.04	19.40	20.73	24.15	24.51	25.15	25.51	26.84
12H	4H	17.24	17.73	18.22	18.73	20.00	20.60	21.09	21.59	22.09	23.36
	6H	18.01	18.41	19.01	19.42	20.71	22.28	22.69	23.28	23.69	24.98
	8H	18.32	18.68	19.32	19.68	21.01	23.22	23.58	24.22	24.58	25.91