

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: P998463

Luminaire Tested: SA2XXDIP-B485D330UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998463
REPORT IS A COMBINATION OF REPORTS P984206 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B485D330UB30-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

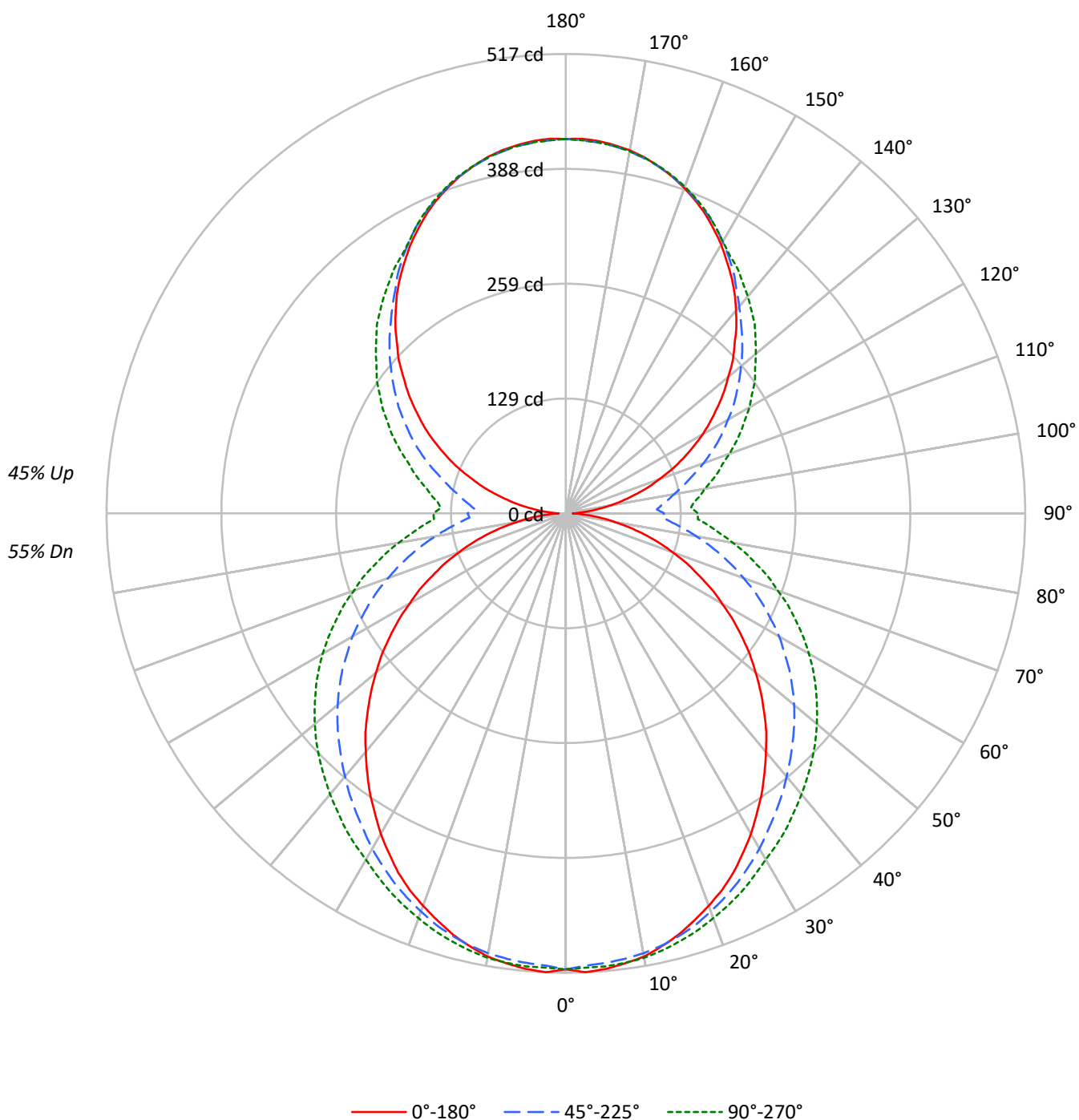
Lumens per Lamp: N/A
Luminaire Lumens: 3137.0 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 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°	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	1.6
10°-20°	139.5	4.4
20°-30°	211.4	6.7
30°-40°	257.4	8.2
40°-50°	277.0	8.8
50°-60°	269.0	8.6
60°-70°	234.9	7.5
70°-80°	180.8	5.8
80°-90°	122.3	3.9
90°-100°	109.6	3.5
100°-110°	143.9	4.6
110°-120°	182.1	5.8
120°-130°	208.9	6.7
130°-140°	218.7	7.0
140°-150°	206.8	6.6
150°-160°	172.1	5.5
160°-170°	114.2	3.6
170°-180°	39.9	1.3
0°-30°	399.6	12.7
0°-40°	657.0	20.9
0°-60°	1202.9	38.3
0°-90°	1740.9	55.5
90°-120°	435.5	13.9
90°-150°	1069.9	34.1
90°-180°	1396.0	44.5
0°-180°	3137.0	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	55	111	140	149	6
95°	24	63	108	137	145	25
105°	80	103	142	169	177	85
115°	145	156	188	210	217	143
125°	208	212	234	253	260	186
135°	268	272	280	296	301	208
145°	325	327	330	334	337	203
155°	372	373	374	375	374	171
165°	404	404	404	406	405	114
175°	421	420	419	421	419	40
180°	421	421	421	421	421	

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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°	7.8	55.2	110.6	139.6	148.9
92.5°	14.5	56.8	102.5	131.9	140.8
95°	24.4	62.9	108.3	136.6	144.7
97.5°	36.1	71.3	115.9	143.4	152.4
100°	50.3	80.7	123.5	151.0	158.8
102.5°	64.6	91.2	132.8	159.9	167.7
105°	80.1	102.8	142.2	168.9	177.1
107.5°	96.5	115.8	153.0	178.6	185.0
110°	111.4	128.4	164.9	188.7	195.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	128.5	142.5	176.4	199.1	206.6
115°	145.2	155.5	188.2	210.2	217.3
117.5°	161.1	170.0	199.4	220.6	227.0
120°	177.8	183.7	210.6	231.4	238.6
122.5°	193.1	197.5	223.2	242.2	248.2
125°	208.4	211.6	234.3	253.4	259.7
127.5°	224.0	227.2	245.8	263.0	268.6
130°	238.6	242.4	257.4	274.5	279.1
132.5°	255.0	257.7	269.3	284.6	289.5
135°	268.4	272.3	280.5	295.8	300.6
137.5°	284.0	287.2	291.7	305.5	309.3
140°	297.9	300.4	303.7	315.6	318.6
142.5°	312.1	314.6	315.7	324.9	327.2
145°	324.9	327.4	329.6	334.4	336.7
147.5°	337.0	340.2	341.6	343.1	343.9
150°	349.5	351.6	353.0	354.1	353.0
152.5°	360.5	362.6	364.4	365.8	364.4
155°	371.5	372.6	373.6	375.4	374.3
157.5°	381.1	381.8	382.5	385.0	383.2
160°	389.6	390.3	390.7	392.8	391.4
162.5°	397.5	397.5	397.8	400.3	398.5
165°	404.2	403.9	403.9	406.3	404.6
167.5°	410.3	409.2	409.2	411.7	409.9
170°	414.9	413.8	413.5	415.9	413.8
172.5°	418.1	417.0	416.7	419.1	417.0
175°	420.6	419.5	418.8	421.3	419.1
177.5°	422.0	420.9	420.2	422.3	420.2
180°	421.3	421.3	421.3	421.3	421.3

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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	12.97	13.94	13.87	14.87	16.05	16.04	17.01	16.94	17.94	19.13
	3H	14.44	15.32	15.34	16.25	17.46	18.64	19.52	19.55	20.45	21.66
	4H	14.92	15.75	15.84	16.69	17.91	19.90	20.73	20.82	21.67	22.89
	6H	15.21	15.98	16.14	16.93	18.16	21.20	21.97	22.13	22.92	24.15
	8H	15.27	16.01	16.21	16.97	18.20	21.86	22.60	22.80	23.57	24.80
	12H	15.29	16.00	16.24	16.95	18.21	22.59	23.30	23.54	24.25	25.51
4H	2H	14.03	14.87	14.96	15.81	17.02	16.38	17.22	17.31	18.16	19.38
	3H	15.75	16.46	16.68	17.43	18.66	19.18	19.89	20.12	20.86	22.10
	4H	16.37	17.03	17.32	17.99	19.25	20.60	21.26	21.55	22.22	23.48
	6H	16.79	17.36	17.75	18.35	19.61	22.08	22.65	23.04	23.64	24.89
	8H	16.91	17.44	17.87	18.42	19.69	22.84	23.37	23.80	24.36	25.63
	12H	16.95	17.44	17.94	18.44	19.72	23.67	24.16	24.66	25.16	26.44
8H	4H	17.17	17.71	18.13	18.69	19.96	20.76	21.29	21.72	22.27	23.55
	6H	17.81	18.26	18.80	19.28	20.55	22.39	22.84	23.38	23.86	25.13
	8H	18.03	18.43	19.03	19.44	20.73	23.28	23.69	24.28	24.69	25.98
	12H	18.17	18.53	19.17	19.53	20.86	24.28	24.64	25.28	25.64	26.97
12H	4H	17.38	17.86	18.36	18.86	20.14	20.74	21.23	21.72	22.22	23.50
	6H	18.14	18.55	19.14	19.56	20.84	22.42	22.82	23.41	23.83	25.12
	8H	18.45	18.81	19.45	19.81	21.15	23.35	23.71	24.35	24.71	26.04