

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: P997859

Luminaire Tested: SA2XXDIP-B1005D330UB2750-4F0-XX-W2A-D_5000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P997859
REPORT IS A COMBINATION OF REPORTS P983596 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B1005D330UB2750-4F0-XX-W2A-D_5000K
Description: Define 2 Direct/Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

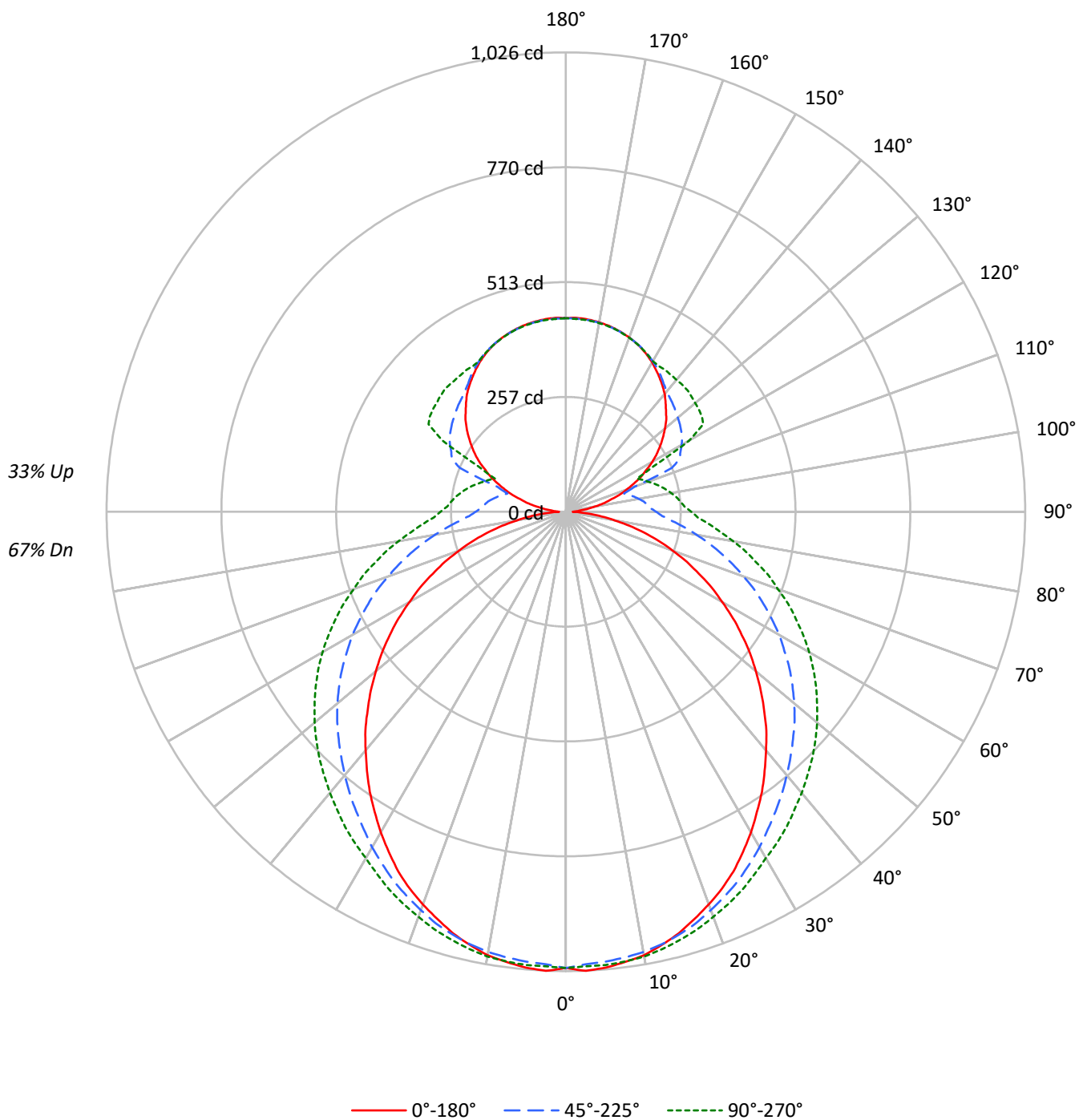
Lumens per Lamp: N/A
Luminaire Lumens: 5156.0 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 70.6
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	100	94	90	85	93	89	85	81	78	75	72	69	67	64	60	58	57
2	90	81	74	68	84	77	70	65	68	63	58	59	56	52	52	49	46
3	82	71	62	56	76	67	59	53	59	53	48	52	47	43	45	42	38
4	74	62	53	47	69	59	51	45	52	46	40	46	41	36	40	36	33
5	68	55	46	40	64	52	44	38	46	40	35	41	36	31	36	32	28
6	63	50	41	34	59	47	39	33	42	35	30	37	31	27	33	28	25
7	58	45	36	30	54	42	34	29	38	31	26	34	28	24	30	25	22
8	54	41	32	26	50	38	31	25	34	28	23	31	25	21	27	23	19
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16

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	1.9
10°-20°	277.0	5.4
20°-30°	419.8	8.1
30°-40°	511.2	9.9
40°-50°	550.0	10.7
50°-60°	534.1	10.4
60°-70°	466.4	9.0
70°-80°	359.0	7.0
80°-90°	241.2	4.7
90°-100°	180.1	3.5
100°-110°	174.3	3.4
110°-120°	220.9	4.3
120°-130°	278.3	5.4
130°-140°	267.0	5.2
140°-150°	233.9	4.5
150°-160°	185.5	3.6
160°-170°	119.5	2.3
170°-180°	41.1	0.8
0°-30°	793.4	15.4
0°-40°	1304.6	25.3
0°-60°	2388.7	46.3
0°-90°	3455.3	67.0
90°-120°	575.3	11.2
90°-150°	1354.5	26.3
90°-180°	1701.0	33.0
0°-180°	5156.0	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°	15	104	201	262	280	11
95°	32	91	182	240	257	33
105°	102	155	146	201	219	110
115°	186	207	282	181	175	182
125°	257	261	314	357	371	230
135°	316	321	339	373	384	245
145°	365	365	370	381	387	229
155°	402	399	403	405	402	185
165°	424	422	423	425	423	120
175°	433	431	432	434	431	41
180°	432	432	432	432	432	

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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°	15.1	104.2	201.2	261.8	280.1
92.5°	21.1	98.2	189.1	247.3	265.4
95°	32.1	91.2	182.0	239.7	257.1
97.5°	46.9	84.7	175.5	231.0	249.1
100°	65.7	77.5	165.5	222.6	239.6
102.5°	84.9	133.0	155.8	212.4	229.5
105°	102.5	154.7	146.1	201.2	218.7
107.5°	124.7	167.9	136.4	190.0	207.5
110°	144.5	180.5	162.5	178.6	196.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	164.5	193.7	256.4	168.8	186.0
115°	185.7	207.4	281.6	181.1	174.8
117.5°	202.7	220.8	288.2	287.7	220.5
120°	223.3	233.9	298.7	343.8	317.8
122.5°	240.9	247.4	308.2	350.0	363.6
125°	257.3	261.4	314.5	356.6	370.8
127.5°	273.6	276.4	320.9	361.1	374.7
130°	288.9	292.4	326.8	365.7	377.2
132.5°	304.5	307.1	332.6	369.4	380.9
135°	316.2	321.2	338.7	372.9	384.1
137.5°	329.9	333.7	344.2	375.3	384.8
140°	343.4	344.4	350.8	377.2	384.5
142.5°	354.6	355.3	359.4	379.6	385.4
145°	365.0	364.7	370.0	381.1	386.8
147.5°	375.3	374.4	379.7	382.8	385.9
150°	385.3	383.2	388.2	390.0	388.5
152.5°	393.8	391.3	396.0	397.9	395.7
155°	401.9	399.1	402.9	404.7	402.2
157.5°	408.5	406.0	408.8	411.0	408.5
160°	414.1	412.2	414.1	416.0	413.8
162.5°	419.1	417.2	418.8	421.0	418.2
165°	423.5	421.6	422.6	424.8	422.6
167.5°	426.9	425.1	426.0	428.2	425.4
170°	429.8	427.9	428.5	430.7	427.9
172.5°	431.6	429.8	430.4	432.6	429.8
175°	433.2	431.0	431.6	433.8	430.7
177.5°	433.8	431.6	431.9	434.1	431.3
180°	432.3	432.3	432.3	432.3	432.3

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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	16.28	17.39	17.06	18.21	19.21	19.35	20.47	20.14	21.28	22.28
	3H	17.75	18.76	18.55	19.59	20.62	21.96	22.97	22.75	23.79	24.82
	4H	18.24	19.20	19.05	20.03	21.07	23.22	24.18	24.03	25.01	26.05
	6H	18.53	19.43	19.36	20.27	21.32	24.53	25.42	25.35	26.26	27.31
	8H	18.60	19.45	19.43	20.31	21.37	25.19	26.05	26.03	26.91	27.96
	12H	18.63	19.44	19.47	20.29	21.38	25.93	26.74	26.77	27.60	28.68
4H	2H	17.35	18.31	18.17	19.15	20.18	19.71	20.67	20.52	21.50	22.54
	3H	19.08	19.90	19.91	20.76	21.82	22.52	23.33	23.35	24.20	25.26
	4H	19.71	20.46	20.55	21.32	22.41	23.94	24.70	24.78	25.56	26.64
	6H	20.14	20.80	20.99	21.69	22.77	25.42	26.08	26.28	26.97	28.05
	8H	20.25	20.87	21.11	21.76	22.86	26.19	26.81	27.05	27.69	28.79
	12H	20.31	20.87	21.19	21.78	22.88	27.03	27.59	27.91	28.50	29.60
8H	4H	20.52	21.14	21.38	22.02	23.12	24.11	24.73	24.97	25.61	26.71
	6H	21.16	21.69	22.05	22.61	23.71	25.75	26.27	26.63	27.19	28.29
	8H	21.39	21.86	22.28	22.77	23.89	26.64	27.11	27.54	28.02	29.14
	12H	21.53	21.95	22.44	22.86	24.03	27.65	28.06	28.55	28.97	30.14
12H	4H	20.73	21.30	21.61	22.20	23.30	24.09	24.66	24.97	25.56	26.67
	6H	21.50	21.97	22.40	22.89	24.00	25.77	26.25	26.67	27.16	28.27
	8H	21.82	22.24	22.72	23.14	24.31	26.72	27.13	27.62	28.04	29.21