

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: P998768

Luminaire Tested: SA2XXDIP-B675D330UB35-4F0-XX-W2A-D

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P998768
REPORT IS A COMBINATION OF REPORTS P984514 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B675D330UB35-4F0-XX-W2A-D
Description: Define 2 Direct/Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

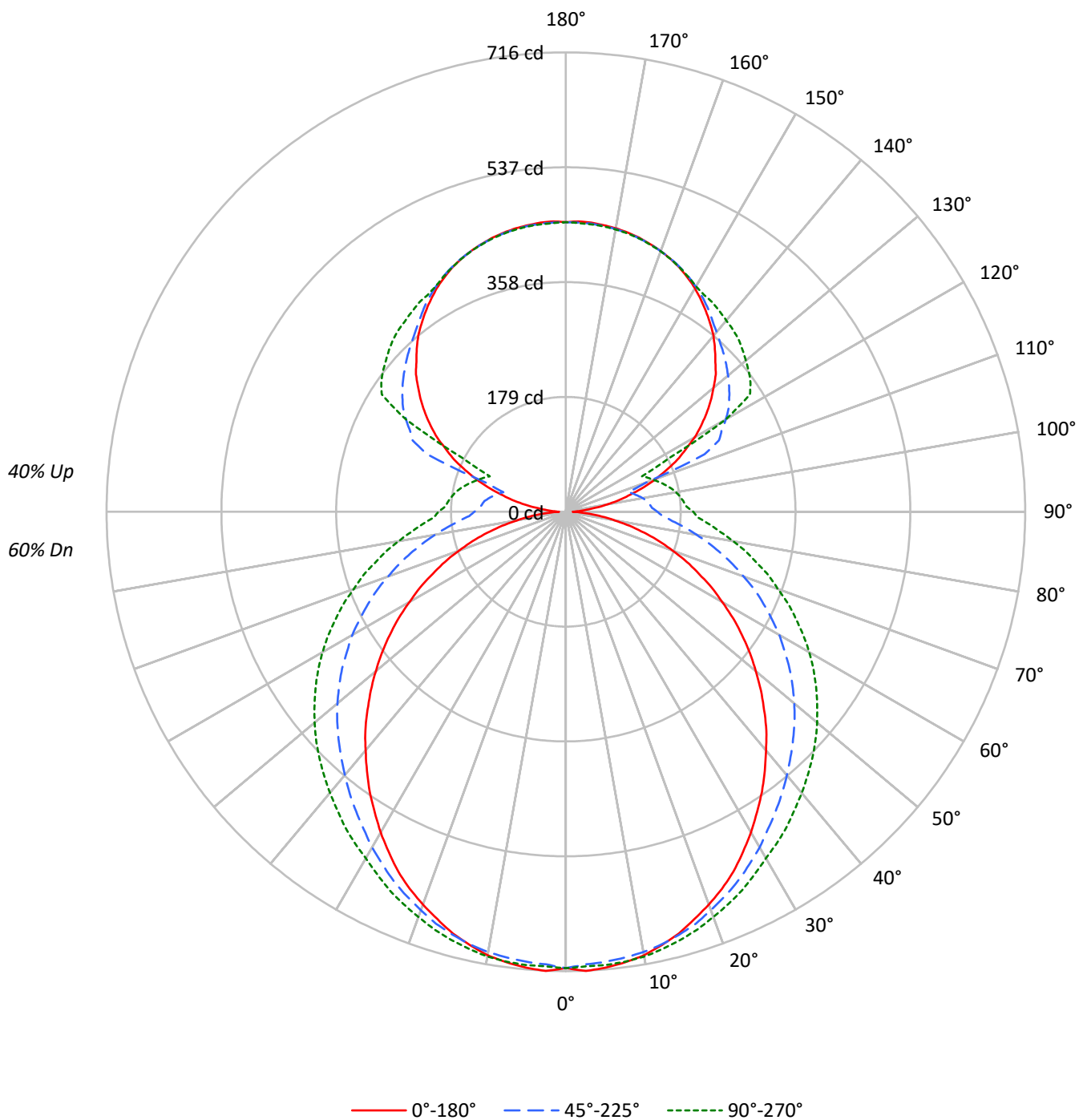
Lumens per Lamp: N/A
Luminaire Lumens: 4038.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 45.2
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	109	109	109	109	102	102	102	102	89	89	89	76	76	76	65	65	65
1	98	93	88	84	91	87	83	79	75	72	69	65	62	60	55	53	51
2	89	80	73	67	82	75	69	63	65	60	56	56	52	49	47	44	42
3	80	70	62	55	75	65	58	52	57	51	46	49	44	40	41	38	35
4	73	62	53	46	68	58	50	44	50	44	39	43	38	34	36	33	30
5	67	55	46	39	62	51	43	37	45	38	33	38	33	29	33	29	25
6	62	49	40	34	57	46	38	32	40	34	29	35	29	26	30	25	22
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	27	23	20
8	53	40	32	26	49	38	30	25	33	27	22	29	24	20	25	21	17
9	49	36	29	23	46	34	27	22	30	24	20	26	21	18	23	19	16
10	46	33	26	21	43	32	25	20	28	22	18	24	20	16	21	17	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11259	11259	11259
5°	11309	10779	10717
10°	11234	10404	10254
15°	11076	10019	9778
20°	10876	9614	9325
25°	10678	9225	8916
30°	10402	8831	8510
35°	10121	8451	8212
40°	9826	8121	7915
45°	9546	7823	7658
50°	9245	7548	7402
55°	8926	7255	7142
60°	8539	6952	6870
65°	8134	6603	6555
70°	7678	6226	6218
75°	7093	5851	5899
80°	6171	5460	5569
85°	5241	5092	5284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 9546 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.4	1.7
10°-20°	193.4	4.8
20°-30°	293.0	7.3
30°-40°	356.8	8.8
40°-50°	383.9	9.5
50°-60°	372.8	9.2
60°-70°	325.6	8.1
70°-80°	250.6	6.2
80°-90°	168.6	4.2
90°-100°	130.7	3.2
100°-110°	140.1	3.5
110°-120°	203.0	5.0
120°-130°	275.2	6.8
130°-140°	272.3	6.7
140°-150°	243.1	6.0
150°-160°	193.7	4.8
160°-170°	124.8	3.1
170°-180°	43.0	1.1
0°-30°	553.8	13.7
0°-40°	910.7	22.6
0°-60°	1667.4	41.3
0°-90°	2412.2	59.7
90°-120°	473.7	11.7
90°-150°	1264.3	31.3
90°-180°	1626.0	40.3
0°-180°	4038.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	711	711	711	711	711	
5°	713	710	704	710	709	68
15°	680	682	682	692	691	192
25°	618	626	635	647	650	284
35°	533	550	570	593	600	333
45°	437	465	501	533	543	337
55°	335	372	426	463	476	300
65°	229	279	340	382	396	227
75°	127	184	250	295	308	134
85°	37	101	167	210	225	39
90°	11	74	143	186	198	8
95°	29	67	131	172	184	32
105°	104	144	109	148	161	112
115°	192	209	263	143	131	189
125°	268	272	311	341	351	239
135°	330	335	348	373	380	255
145°	381	381	386	395	398	239
155°	420	417	421	423	420	193
165°	442	440	441	444	441	125
175°	452	450	451	453	450	43
180°	451	451	451	451	451	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	711.3	711.3	711.3	711.3	711.3
2.5°	716.4	713.3	706.1	711.3	709.2
5°	713.3	710.3	704.1	710.3	709.2
7.5°	708.2	706.1	701.0	708.2	707.2
10°	702.0	699.9	696.8	705.1	704.1
12.5°	691.7	692.7	690.7	698.9	697.9
15°	680.4	682.4	682.4	691.7	690.7
17.5°	665.9	670.0	673.1	682.4	682.4
20°	651.5	656.6	660.8	672.1	672.1
22.5°	636.0	642.2	648.4	659.7	661.8
25°	618.5	625.7	635.0	647.4	650.5
27.5°	597.9	609.2	619.5	635.0	637.1
30°	577.3	590.7	604.1	620.6	623.7
32.5°	554.6	570.1	586.5	606.1	612.3
35°	532.9	550.5	570.1	592.7	600.0
37.5°	509.2	528.8	553.6	578.3	585.5
40°	485.5	508.2	536.0	562.8	572.1
42.5°	462.8	485.5	518.5	548.4	557.7
45°	437.1	464.9	501.0	532.9	543.3
47.5°	412.3	442.2	483.5	516.5	527.8
50°	386.6	418.5	464.9	500.0	511.3
52.5°	361.8	395.8	445.3	481.4	493.8
55°	335.0	372.1	425.7	462.8	476.2
57.5°	309.3	350.5	404.1	444.3	457.7
60°	281.4	325.7	384.5	423.7	438.1
62.5°	256.7	303.1	361.8	404.1	417.5
65°	228.8	279.4	340.2	382.4	395.8
67.5°	204.1	256.7	318.5	360.8	375.2
70°	177.3	230.9	294.8	339.1	351.5
72.5°	152.6	208.2	273.2	316.5	331.9
75°	126.8	184.5	250.5	294.8	308.2
77.5°	102.1	161.8	228.8	273.2	287.6
80°	77.3	140.2	207.2	250.5	264.9
82.5°	56.7	118.5	186.6	229.9	243.3
85°	37.1	101.0	167.0	210.3	224.7
87.5°	22.7	84.5	150.5	192.8	206.2
90°	10.6	74.0	142.6	185.5	198.5
92.5°	17.5	70.8	134.6	175.5	188.2
95°	29.4	67.2	131.2	172.1	184.1
97.5°	45.4	62.9	128.0	167.1	179.8
100°	65.0	58.5	121.7	162.4	174.5
102.5°	85.6	118.9	115.2	155.9	168.1
105°	104.5	144.1	108.6	148.2	160.9
107.5°	127.7	160.5	102.0	140.7	153.3
110°	148.8	176.2	132.5	132.7	145.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	169.7	192.1	233.9	126.1	138.5
115°	191.9	208.8	263.4	143.1	130.9
117.5°	210.2	224.9	273.7	258.0	182.8
120°	231.7	240.7	287.8	320.6	287.9
122.5°	250.0	256.2	301.0	330.7	340.3
125°	267.6	271.9	311.0	341.2	351.4
127.5°	284.6	288.1	320.9	349.8	359.5
130°	300.6	304.7	330.0	358.3	366.3
132.5°	316.9	320.1	339.2	365.8	373.7
135°	329.6	334.8	348.0	373.0	380.5
137.5°	343.9	347.8	356.3	379.2	385.4
140°	358.0	359.6	365.3	384.7	389.2
142.5°	369.7	371.0	375.3	390.3	393.7
145°	381.1	380.8	386.4	394.8	398.3
147.5°	391.9	390.9	396.5	399.1	400.9
150°	402.4	400.1	405.3	407.3	405.6
152.5°	411.2	408.6	413.5	415.4	413.1
155°	419.7	416.7	420.7	422.6	420.0
157.5°	426.5	423.9	426.9	429.1	426.5
160°	432.4	430.5	432.4	434.4	432.1
162.5°	437.6	435.7	437.3	439.6	436.7
165°	442.2	440.2	441.2	443.5	441.2
167.5°	445.8	443.8	444.8	447.1	444.2
170°	448.7	446.8	447.4	449.7	446.8
172.5°	450.7	448.7	449.4	451.7	448.7
175°	452.3	450.0	450.7	453.0	449.7
177.5°	453.0	450.7	451.0	453.3	450.4
180°	451.4	451.4	451.4	451.4	451.4

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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	14.46	15.48	15.31	16.36	17.48	17.53	18.55	18.39	19.44	20.56
	3H	15.93	16.85	16.80	17.75	18.89	20.13	21.06	21.00	21.95	23.10
	4H	16.41	17.29	17.29	18.19	19.35	21.39	22.27	22.27	23.17	24.33
	6H	16.70	17.52	17.60	18.42	19.59	22.69	23.51	23.59	24.42	25.59
	8H	16.76	17.54	17.67	18.47	19.64	23.36	24.14	24.26	25.07	26.23
	12H	16.79	17.53	17.70	18.45	19.65	24.09	24.83	25.00	25.75	26.95
4H	2H	15.52	16.40	16.41	17.31	18.46	17.88	18.76	18.77	19.66	20.81
	3H	17.24	17.99	18.14	18.92	20.09	20.68	21.43	21.58	22.36	23.53
	4H	17.87	18.56	18.78	19.49	20.68	22.10	22.79	23.01	23.72	24.91
	6H	18.29	18.90	19.22	19.85	21.04	23.58	24.18	24.50	25.13	26.33
	8H	18.41	18.97	19.33	19.92	21.13	24.34	24.91	25.27	25.85	27.06
	12H	18.46	18.97	19.41	19.94	21.15	25.18	25.69	26.12	26.66	27.87
8H	4H	18.67	19.24	19.60	20.19	21.40	22.26	22.82	23.19	23.77	24.98
	6H	19.31	19.79	20.26	20.78	21.98	23.90	24.37	24.85	25.36	26.57
	8H	19.54	19.96	20.50	20.94	22.16	24.79	25.21	25.75	26.19	27.42
	12H	19.68	20.06	20.64	21.03	22.30	25.79	26.17	26.76	27.14	28.41
12H	4H	18.88	19.39	19.83	20.36	21.57	22.24	22.76	23.19	23.72	24.94
	6H	19.65	20.08	20.61	21.05	22.28	23.92	24.35	24.88	25.32	26.55
	8H	19.96	20.34	20.93	21.31	22.58	24.86	25.24	25.83	26.21	27.48