

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: P999118

Luminaire Tested: SA2XXDIP-B865D530UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999118
REPORT IS A COMBINATION OF REPORTS P984867 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D530UB30-4F0-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

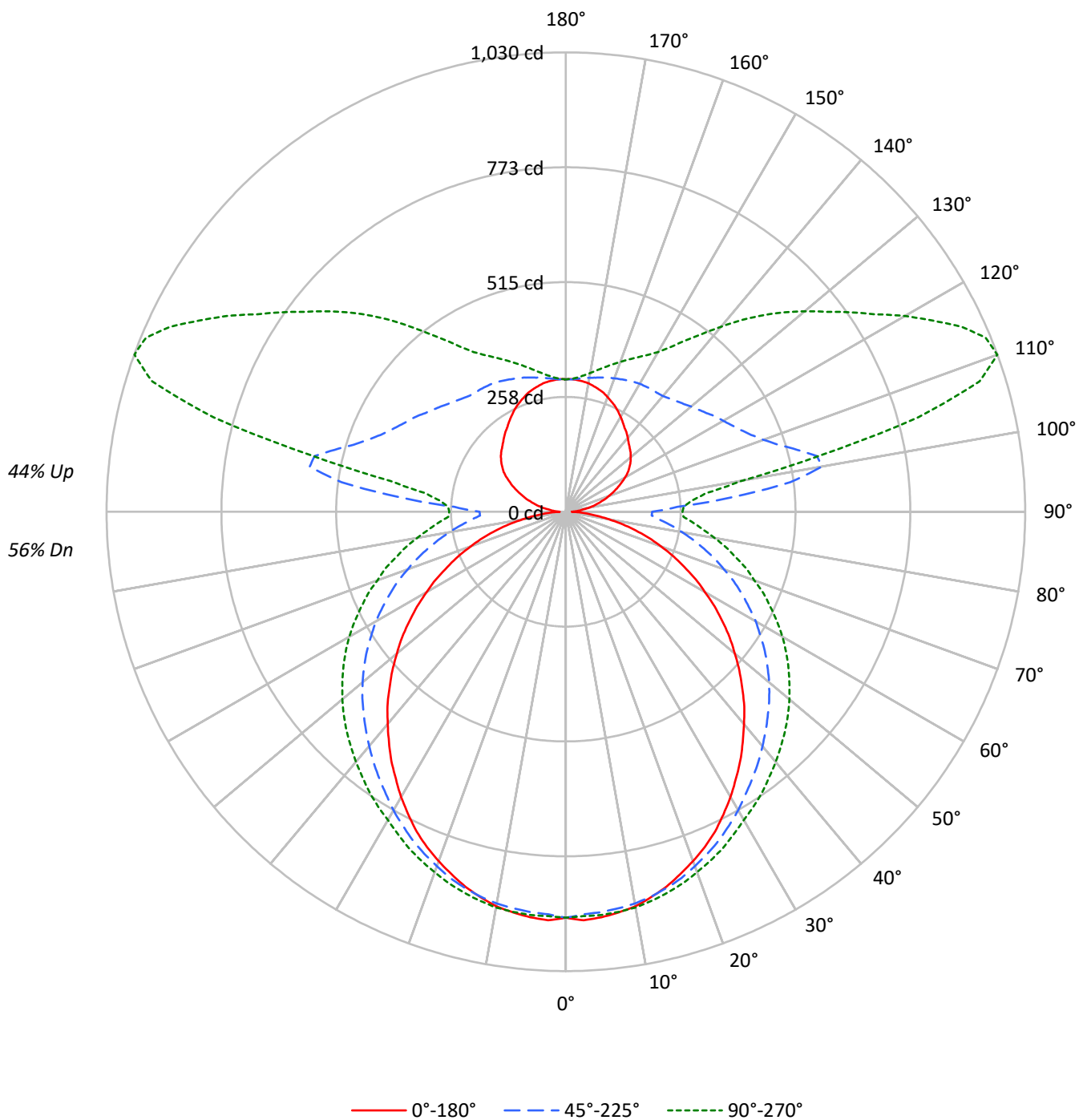
Lumens per Lamp: N/A
Luminaire Lumens: 5546.4 lumens
Efficiency: N/A
Efficacy: 89.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 62.2
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	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	52	50	48
2	88	80	73	67	81	74	68	63	63	59	55	54	50	47	44	42	40
3	80	69	61	55	74	65	57	52	55	50	45	47	43	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	62	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	19
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°	14408	14408	14408
5°	14473	13793	13716
10°	14375	13315	13121
15°	14172	12822	12511
20°	13917	12303	11934
25°	13665	11806	11409
30°	13310	11300	10889
35°	12952	10814	10507
40°	12575	10392	10129
45°	12215	10011	9799
50°	11830	9659	9472
55°	11423	9285	9140
60°	10927	8895	8791
65°	10409	8448	8389
70°	9826	7969	7957
75°	9079	7486	7549
80°	7896	6986	7127
85°	6710	6516	6763

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 12215 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.6
10°-20°	247.5	4.5
20°-30°	375.0	6.8
30°-40°	456.6	8.2
40°-50°	491.3	8.9
50°-60°	477.1	8.6
60°-70°	416.7	7.5
70°-80°	320.7	5.8
80°-90°	216.7	3.9
90°-100°	268.6	4.8
100°-110°	515.4	9.3
110°-120°	499.4	9.0
120°-130°	391.8	7.1
130°-140°	299.5	5.4
140°-150°	216.5	3.9
150°-160°	150.2	2.7
160°-170°	88.4	1.6
170°-180°	28.8	0.5
0°-30°	708.7	12.8
0°-40°	1165.3	21.0
0°-60°	2133.7	38.5
0°-90°	3087.7	55.7
90°-120°	1283.5	23.1
90°-150°	2191.2	39.5
90°-180°	2459.0	44.3
0°-180°	5546.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	913	909	901	909	908	87
15°	871	873	873	885	884	245
25°	792	801	813	828	832	364
35°	682	704	730	758	768	426
45°	559	595	641	682	695	432
55°	429	476	545	592	609	383
65°	293	358	435	489	506	291
75°	162	236	320	377	394	172
85°	48	129	214	269	288	50
90°	14	97	194	246	262	11
95°	31	122	376	286	283	29
105°	76	150	537	916	818	82
115°	128	175	433	850	980	127
125°	174	205	385	673	780	155
135°	202	241	351	540	622	157
145°	230	264	335	424	469	144
155°	261	282	325	368	382	120
165°	284	293	311	330	335	80
175°	296	297	299	303	302	28
180°	297	297	297	297	297	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.2	910.2	910.2	910.2	910.2
2.5°	916.8	912.8	903.6	910.2	907.6
5°	912.8	908.9	901.0	908.9	907.6
7.5°	906.2	903.6	897.0	906.2	904.9
10°	898.3	895.7	891.7	902.3	901.0
12.5°	885.1	886.5	883.8	894.4	893.1
15°	870.6	873.3	873.3	885.1	883.8
17.5°	852.2	857.4	861.4	873.3	873.3
20°	833.7	840.3	845.6	860.1	860.1
22.5°	813.9	821.8	829.7	844.2	846.9
25°	791.5	800.7	812.6	828.4	832.4
27.5°	765.1	779.6	792.8	812.6	815.2
30°	738.7	755.9	773.0	794.1	798.1
32.5°	709.7	729.5	750.6	775.6	783.6
35°	682.0	704.4	729.5	758.5	767.7
37.5°	651.6	676.7	708.4	740.0	749.3
40°	621.3	650.3	685.9	720.2	732.1
42.5°	592.3	621.3	663.5	701.8	713.6
45°	559.3	594.9	641.1	682.0	695.2
47.5°	527.7	565.9	618.7	660.9	675.4
50°	494.7	535.6	594.9	639.8	654.3
52.5°	463.0	506.5	569.9	616.0	631.9
55°	428.7	476.2	544.8	592.3	609.4
57.5°	395.7	448.5	517.1	568.5	585.7
60°	360.1	416.8	492.0	542.2	560.6
62.5°	328.5	387.8	463.0	517.1	534.2
65°	292.8	357.5	435.3	489.4	506.5
67.5°	261.2	328.5	407.6	461.7	480.2
70°	226.9	295.5	377.3	434.0	449.8
72.5°	195.2	266.5	349.6	405.0	424.8
75°	162.3	236.1	320.5	377.3	394.4
77.5°	130.6	207.1	292.8	349.6	368.0
80°	98.9	179.4	265.1	320.5	339.0
82.5°	72.6	151.7	238.8	294.2	311.3
85°	47.5	129.3	213.7	269.1	287.6
87.5°	29.0	108.2	192.6	246.7	263.8
90°	13.8	97.4	193.5	245.5	261.6
92.5°	20.5	109.0	250.3	254.3	264.4
95°	30.6	121.8	375.7	286.4	282.8
97.5°	38.9	130.8	507.6	361.0	316.2
100°	53.2	137.4	583.3	518.6	399.7
102.5°	65.0	144.0	576.9	741.6	583.5
105°	76.3	150.0	536.8	916.4	818.0
107.5°	90.0	156.0	499.0	973.0	972.7
110°	102.4	162.2	471.7	951.6	1029.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	115.0	169.3	449.9	905.5	1019.1
115°	128.1	174.9	433.3	849.8	980.5
117.5°	140.6	181.9	419.6	797.4	927.8
120°	153.1	188.6	407.7	748.3	877.9
122.5°	165.1	197.0	397.5	709.1	823.8
125°	174.0	205.4	385.4	672.7	779.7
127.5°	182.6	214.7	375.7	639.0	736.6
130°	190.0	224.1	366.7	606.4	699.1
132.5°	196.9	233.3	358.2	572.7	661.9
135°	202.4	241.3	351.0	539.9	622.5
137.5°	208.7	248.2	344.4	506.6	582.7
140°	216.1	253.1	338.6	476.2	541.9
142.5°	223.6	258.2	336.0	448.0	502.3
145°	229.7	264.0	334.8	423.6	469.3
147.5°	237.7	268.6	333.1	402.4	437.8
150°	245.7	273.2	331.4	388.5	413.1
152.5°	253.7	277.7	328.5	378.0	396.5
155°	261.1	282.0	325.1	367.6	382.2
157.5°	267.4	285.4	321.7	358.0	369.7
160°	273.7	288.8	318.3	348.2	357.7
162.5°	280.0	291.4	315.4	339.1	346.2
165°	284.5	293.1	311.4	330.2	335.4
167.5°	288.5	294.8	308.0	322.2	325.1
170°	292.5	295.6	305.1	314.8	316.0
172.5°	294.8	296.6	301.7	308.2	308.5
175°	296.5	296.8	299.4	303.1	302.3
177.5°	297.7	297.1	297.1	299.4	297.7
180°	297.1	297.1	297.1	297.1	297.1

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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	14.98	15.95	15.87	16.87	18.05	18.05	19.02	18.95	19.95	21.13
	3H	16.44	17.32	17.35	18.26	19.46	20.65	21.53	21.55	22.46	23.67
	4H	16.92	17.76	17.84	18.70	19.91	21.90	22.74	22.82	23.68	24.89
	6H	17.21	17.99	18.14	18.93	20.16	23.21	23.98	24.14	24.93	26.16
	8H	17.27	18.02	18.21	18.98	20.21	23.87	24.61	24.81	25.57	26.80
	12H	17.29	18.00	18.24	18.96	20.21	24.60	25.31	25.54	26.26	27.52
4H	2H	16.04	16.87	16.96	17.81	19.03	18.39	19.23	19.32	20.17	21.38
	3H	17.75	18.46	18.69	19.43	20.66	21.19	21.90	22.13	22.87	24.10
	4H	18.38	19.03	19.32	20.00	21.25	22.61	23.27	23.56	24.23	25.48
	6H	18.80	19.37	19.76	20.36	21.61	24.09	24.66	25.04	25.64	26.90
	8H	18.91	19.45	19.87	20.43	21.70	24.85	25.38	25.81	26.36	27.63
	12H	18.96	19.45	19.94	20.45	21.72	25.68	26.17	26.66	27.16	28.44
8H	4H	19.18	19.72	20.14	20.69	21.96	22.76	23.30	23.73	24.28	25.55
	6H	19.82	20.27	20.80	21.29	22.55	24.40	24.85	25.38	25.87	27.14
	8H	20.04	20.44	21.03	21.45	22.73	25.29	25.69	26.28	26.70	27.98
	12H	20.18	20.54	21.18	21.54	22.87	26.29	26.65	27.29	27.65	28.98
12H	4H	19.38	19.87	20.36	20.87	22.14	22.74	23.23	23.73	24.23	25.50
	6H	20.15	20.56	21.14	21.56	22.85	24.42	24.83	25.42	25.84	27.12
	8H	20.46	20.82	21.46	21.82	23.15	25.36	25.72	26.36	26.72	28.05