

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: P999044

Luminaire Tested: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999044
REPORT IS A COMBINATION OF REPORTS P984793 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

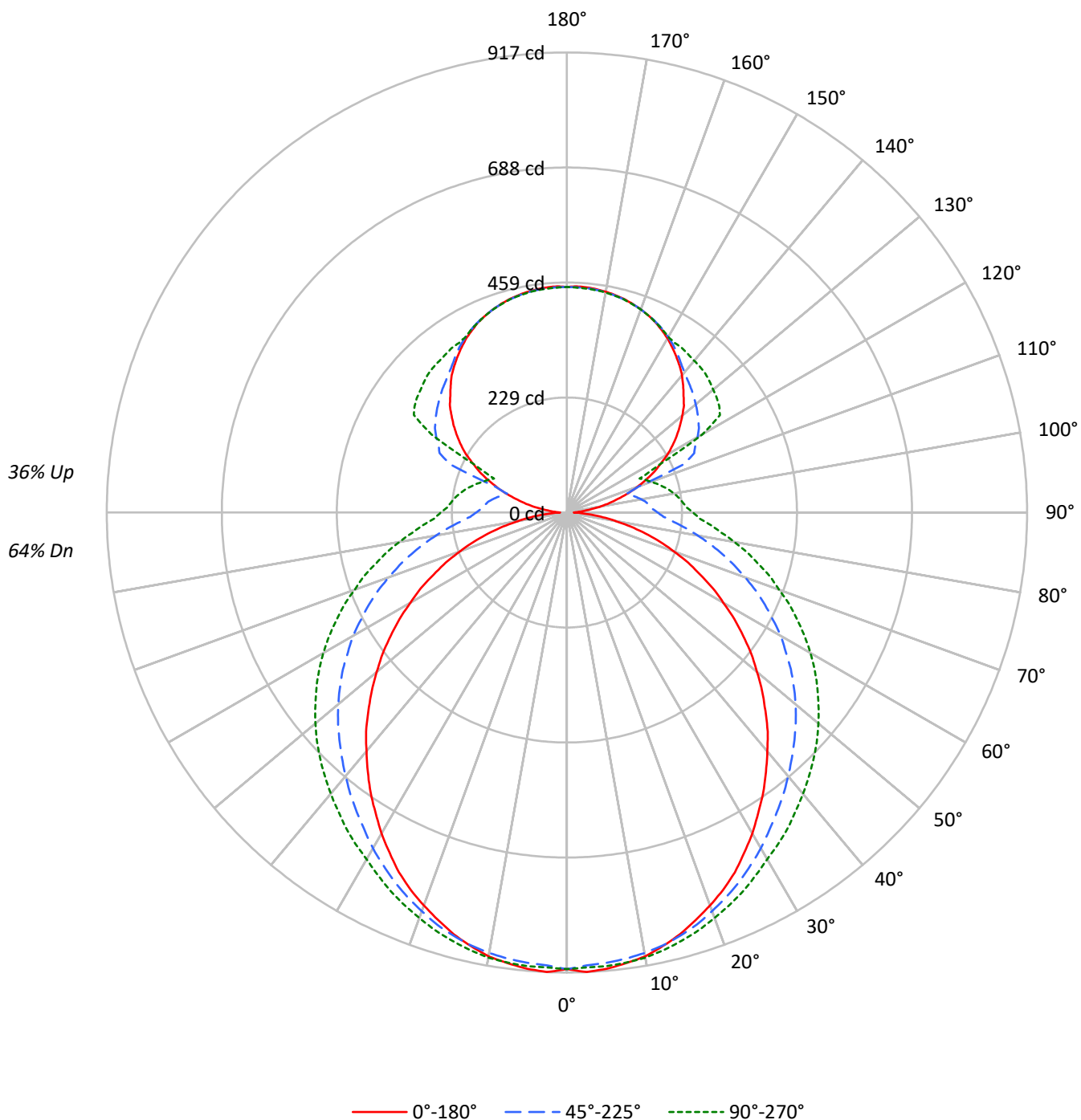
Lumens per Lamp: N/A
Luminaire Lumens: 4792.0 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 56.1
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

TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

Luminous Intensity Polar Plot



TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

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	104	104	104	104	91	91	91	80	80	80	69	69	69
1	99	94	89	85	93	88	84	80	77	74	71	67	65	63	58	56	55
2	89	81	74	68	83	76	70	64	67	62	57	58	54	51	50	47	45
3	81	70	62	56	76	66	59	53	58	52	47	51	46	42	44	40	37
4	74	62	53	47	69	58	50	44	51	45	40	45	40	36	39	35	32
5	68	55	46	40	63	52	44	38	46	39	34	40	35	31	35	31	27
6	62	49	41	34	58	46	38	33	41	35	30	36	31	27	31	27	24
7	58	44	36	30	54	42	34	29	37	31	26	33	27	23	29	24	21
8	54	40	32	26	50	38	31	25	34	28	23	30	25	21	26	22	19
9	50	37	29	23	47	35	28	23	31	25	21	28	22	19	24	20	17
10	47	34	26	21	44	32	25	20	29	23	19	25	20	17	22	18	15

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

TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.8
10°-20°	247.5	5.2
20°-30°	375.0	7.8
30°-40°	456.6	9.5
40°-50°	491.3	10.3
50°-60°	477.1	10.0
60°-70°	416.7	8.7
70°-80°	320.7	6.7
80°-90°	215.6	4.5
90°-100°	163.0	3.4
100°-110°	163.5	3.4
110°-120°	218.0	4.6
120°-130°	282.9	5.9
130°-140°	275.0	5.7
140°-150°	242.8	5.1
150°-160°	193.0	4.0
160°-170°	124.3	2.6
170°-180°	42.8	0.9
0°-30°	708.7	14.8
0°-40°	1165.3	24.3
0°-60°	2133.7	44.5
0°-90°	3086.6	64.4
90°-120°	544.5	11.4
90°-150°	1345.3	28.1
90°-180°	1705.0	35.6
0°-180°	4792.0	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	94	181	235	252	10
95°	32	83	164	216	232	33
105°	106	154	133	183	199	113
115°	192	212	280	169	160	189
125°	267	271	320	358	370	239
135°	329	334	350	381	391	254
145°	380	379	385	395	400	238
155°	418	415	419	421	418	193
165°	440	439	440	442	440	124
175°	451	448	449	451	448	43
180°	450	450	450	450	450	

TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

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°	13.5	93.6	180.6	235.0	251.5
92.5°	20.0	88.6	170.1	222.2	238.3
95°	31.7	83.0	164.4	216.1	231.7
97.5°	47.3	77.4	159.1	208.9	225.0
100°	66.8	71.0	150.4	201.8	217.0
102.5°	87.0	129.8	141.9	193.0	208.5
105°	105.5	153.6	133.2	183.0	198.8
107.5°	128.6	168.4	124.7	173.2	189.0
110°	149.4	182.7	153.2	162.9	178.7



TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	197.2	252.4	154.4	169.8
115°	192.4	212.4	279.8	168.8	159.9
117.5°	210.3	227.3	288.2	281.3	209.2
120°	231.8	241.8	300.5	341.3	311.9
122.5°	250.0	256.5	311.8	349.3	361.6
125°	267.1	271.3	319.8	357.7	370.5
127.5°	284.0	287.3	327.8	364.0	376.3
130°	300.0	303.9	335.2	370.4	380.6
132.5°	316.2	319.2	342.6	375.8	386.1
135°	328.6	333.8	349.9	380.9	390.8
137.5°	342.9	346.8	356.7	385.0	393.3
140°	356.9	358.2	364.4	388.4	394.8
142.5°	368.6	369.6	373.8	392.2	397.2
145°	379.7	379.4	384.9	395.1	400.1
147.5°	390.4	389.5	395.0	397.9	400.6
150°	400.8	398.6	403.8	405.7	404.1
152.5°	409.6	407.0	411.9	413.9	411.6
155°	418.1	415.2	419.1	421.0	418.4
157.5°	424.9	422.3	425.2	427.5	424.9
160°	430.8	428.8	430.8	432.7	430.5
162.5°	436.0	434.0	435.7	437.9	435.0
165°	440.5	438.6	439.6	441.8	439.6
167.5°	444.1	442.2	443.1	445.4	442.5
170°	447.0	445.1	445.7	448.0	445.1
172.5°	449.0	447.0	447.7	450.0	447.0
175°	450.6	448.3	449.0	451.3	448.0
177.5°	451.3	449.0	449.3	451.6	448.7
180°	449.6	449.6	449.6	449.6	449.6

TEST NUMBER: P999044

CATALOG NUMBER: SA2XXDIP-B865D330UB2750-4F0-XX-W2A-D_3000K

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	15.69	16.76	16.50	17.61	18.65	18.76	19.84	19.57	20.68	21.73
	3H	17.16	18.14	17.98	18.99	20.06	21.36	22.34	22.18	23.19	24.26
	4H	17.64	18.57	18.48	19.43	20.51	22.62	23.55	23.46	24.41	25.49
	6H	17.94	18.80	18.79	19.67	20.76	23.93	24.79	24.78	25.66	26.76
	8H	18.00	18.83	18.86	19.71	20.81	24.60	25.42	25.46	26.31	27.40
	12H	18.03	18.82	18.89	19.69	20.82	25.33	26.12	26.20	27.00	28.12
4H	2H	16.76	17.69	17.60	18.55	19.63	19.11	20.04	19.95	20.90	21.98
	3H	18.48	19.27	19.34	20.16	21.26	21.92	22.71	22.77	23.60	24.70
	4H	19.11	19.84	19.98	20.73	21.85	23.34	24.07	24.21	24.96	26.08
	6H	19.54	20.18	20.42	21.09	22.21	24.82	25.46	25.70	26.37	27.50
	8H	19.65	20.25	20.54	21.16	22.30	25.59	26.19	26.47	27.09	28.23
	12H	19.71	20.25	20.61	21.18	22.32	26.43	26.97	27.33	27.90	29.04
8H	4H	19.92	20.52	20.80	21.42	22.56	23.50	24.10	24.39	25.01	26.15
	6H	20.56	21.07	21.47	22.01	23.15	25.14	25.65	26.05	26.60	27.73
	8H	20.78	21.24	21.70	22.18	23.33	26.04	26.49	26.96	27.43	28.58
	12H	20.93	21.33	21.85	22.26	23.47	27.04	27.44	27.97	28.38	29.58
12H	4H	20.13	20.67	21.03	21.60	22.74	23.49	24.04	24.39	24.96	26.11
	6H	20.90	21.35	21.82	22.29	23.44	25.17	25.62	26.09	26.56	27.72
	8H	21.21	21.61	22.14	22.55	23.75	26.11	26.51	27.04	27.45	28.65