

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: P999058

Luminaire Tested: SA2XXDIP-B865D330UB30-4F0-XX-W2A-D4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999058
REPORT IS A COMBINATION OF REPORTS P984807 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D330UB30-4F0-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

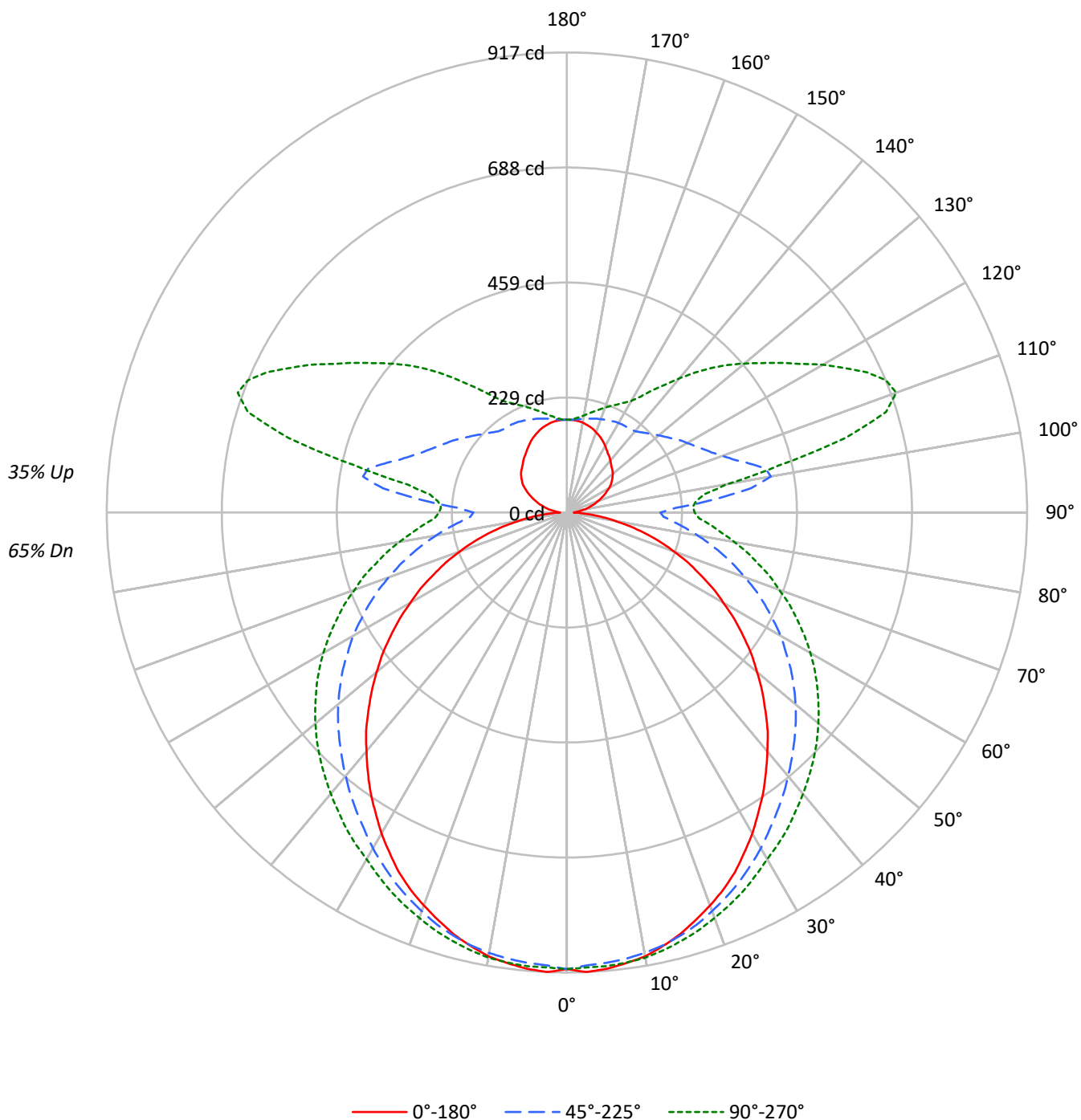
Lumens per Lamp: N/A
Luminaire Lumens: 4762.5 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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: P999058

CATALOG NUMBER: SA2XXDIP-B865D330UB30-4F0-XX-W2A-D4

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	104	104	104	104	92	92	92	80	80	80	70	70	70
1	99	94	89	85	93	88	84	80	77	74	71	68	65	63	59	57	55
2	90	81	74	68	84	76	70	64	67	62	58	58	54	51	50	48	45
3	81	71	62	56	76	66	59	53	58	52	48	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	47	39	33	41	35	30	36	31	27	32	27	24
7	58	44	36	30	54	42	34	29	37	31	26	33	28	24	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	26	20	17	23	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: P999058

CATALOG NUMBER: SA2XXDIP-B865D330UB30-4F0-XX-W2A-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.8
10°-20°	247.5	5.2
20°-30°	375.0	7.9
30°-40°	456.6	9.6
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°	216.0	4.5
90°-100°	223.1	4.7
100°-110°	361.4	7.6
110°-120°	337.6	7.1
120°-130°	258.7	5.4
130°-140°	192.6	4.0
140°-150°	135.7	2.8
150°-160°	93.4	2.0
160°-170°	55.0	1.2
170°-180°	17.9	0.4
0°-30°	708.7	14.9
0°-40°	1165.3	24.5
0°-60°	2133.7	44.8
0°-90°	3087.0	64.8
90°-120°	922.2	19.4
90°-150°	1509.2	31.7
90°-180°	1675.0	35.2
0°-180°	4762.5	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	186	238	254	10
95°	23	103	291	254	258	21
105°	50	110	377	630	575	54
115°	82	116	299	573	660	81
125°	109	129	257	449	520	98
135°	126	151	224	352	407	98
145°	143	164	208	266	297	90
155°	162	175	202	229	238	75
165°	177	182	194	205	209	50
175°	184	185	186	188	188	18
180°	185	185	185	185	185	

TEST NUMBER: P999058

CATALOG NUMBER: SA2XXDIP-B865D330UB30-4F0-XX-W2A-D4

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°	13.6	94.5	186.2	238.4	254.4
92.5°	17.2	98.6	217.0	239.0	251.2
95°	23.0	103.2	291.0	254.4	258.2
97.5°	27.7	106.3	369.6	296.8	275.0
100°	36.6	107.4	412.6	390.9	322.4
102.5°	43.4	109.0	405.2	525.5	432.7
105°	50.0	110.3	376.7	630.2	574.6
107.5°	58.5	111.5	349.7	661.5	666.8
110°	65.7	112.8	329.8	644.2	698.1



TEST NUMBER: P999058

CATALOG NUMBER: SA2XXDIP-B865D330UB30-4F0-XX-W2A-D4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	73.5	115.2	312.7	612.0	688.2
115°	81.7	116.3	299.4	573.4	660.2
117.5°	88.9	118.6	287.4	537.3	623.4
120°	96.7	120.8	277.0	502.8	588.9
122.5°	104.2	124.6	267.7	474.9	550.8
125°	109.2	128.8	256.7	448.8	519.8
127.5°	114.5	134.0	247.6	423.8	489.0
130°	119.2	139.9	239.0	400.0	461.7
132.5°	123.4	145.6	230.8	375.6	435.1
135°	126.4	150.6	223.8	351.8	407.1
137.5°	130.3	154.8	217.2	327.6	378.4
140°	134.9	157.4	211.5	305.2	349.0
142.5°	139.5	160.6	208.9	284.6	320.9
145°	142.8	164.2	208.2	266.4	297.4
147.5°	147.8	167.0	207.2	250.8	274.3
150°	152.8	169.9	206.1	241.6	256.9
152.5°	157.8	172.7	204.3	235.0	246.6
155°	162.4	175.4	202.2	228.6	237.7
157.5°	166.3	177.5	200.1	222.6	229.9
160°	170.2	179.6	197.9	216.6	222.4
162.5°	174.1	181.2	196.2	210.9	215.3
165°	177.0	182.3	193.7	205.4	208.6
167.5°	179.4	183.4	191.5	200.4	202.2
170°	181.9	183.9	189.8	195.8	196.5
172.5°	183.4	184.4	187.6	191.7	191.9
175°	184.4	184.6	186.2	188.5	188.0
177.5°	185.1	184.8	184.8	186.2	185.1
180°	184.8	184.8	184.8	184.8	184.8

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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	15.72	16.80	16.52	17.64	18.68	18.79	19.87	19.60	20.71	21.75
	3H	17.19	18.17	18.01	19.02	20.09	21.39	22.38	22.21	23.22	24.29
	4H	17.67	18.61	18.51	19.46	20.54	22.66	23.59	23.49	24.45	25.52
	6H	17.97	18.84	18.82	19.70	20.79	23.96	24.83	24.81	25.69	26.78
	8H	18.03	18.86	18.89	19.75	20.83	24.63	25.46	25.48	26.34	27.43
	12H	18.06	18.85	18.92	19.73	20.84	25.36	26.15	26.22	27.03	28.15
4H	2H	16.79	17.72	17.63	18.58	19.65	19.14	20.08	19.98	20.93	22.01
	3H	18.51	19.31	19.36	20.19	21.29	21.95	22.75	22.80	23.63	24.72
	4H	19.14	19.87	20.01	20.76	21.87	23.37	24.11	24.24	24.99	26.11
	6H	19.57	20.21	20.45	21.12	22.24	24.86	25.50	25.73	26.40	27.52
	8H	19.68	20.29	20.56	21.19	22.32	25.62	26.22	26.50	27.12	28.26
	12H	19.74	20.29	20.64	21.21	22.35	26.46	27.01	27.36	27.93	29.07
8H	4H	19.95	20.55	20.83	21.46	22.59	23.54	24.14	24.42	25.04	26.18
	6H	20.59	21.10	21.50	22.04	23.18	25.17	25.69	26.08	26.63	27.76
	8H	20.82	21.27	21.73	22.21	23.36	26.07	26.52	26.98	27.46	28.61
	12H	20.96	21.37	21.88	22.30	23.49	27.07	27.48	27.99	28.41	29.61
12H	4H	20.16	20.71	21.06	21.63	22.77	23.52	24.07	24.42	24.99	26.13
	6H	20.93	21.39	21.85	22.32	23.47	25.20	25.66	26.12	26.59	27.74
	8H	21.24	21.65	22.17	22.58	23.78	26.14	26.55	27.06	27.48	28.68