

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: P999000

Luminaire Tested: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999000
REPORT IS A COMBINATION OF REPORTS P984746 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

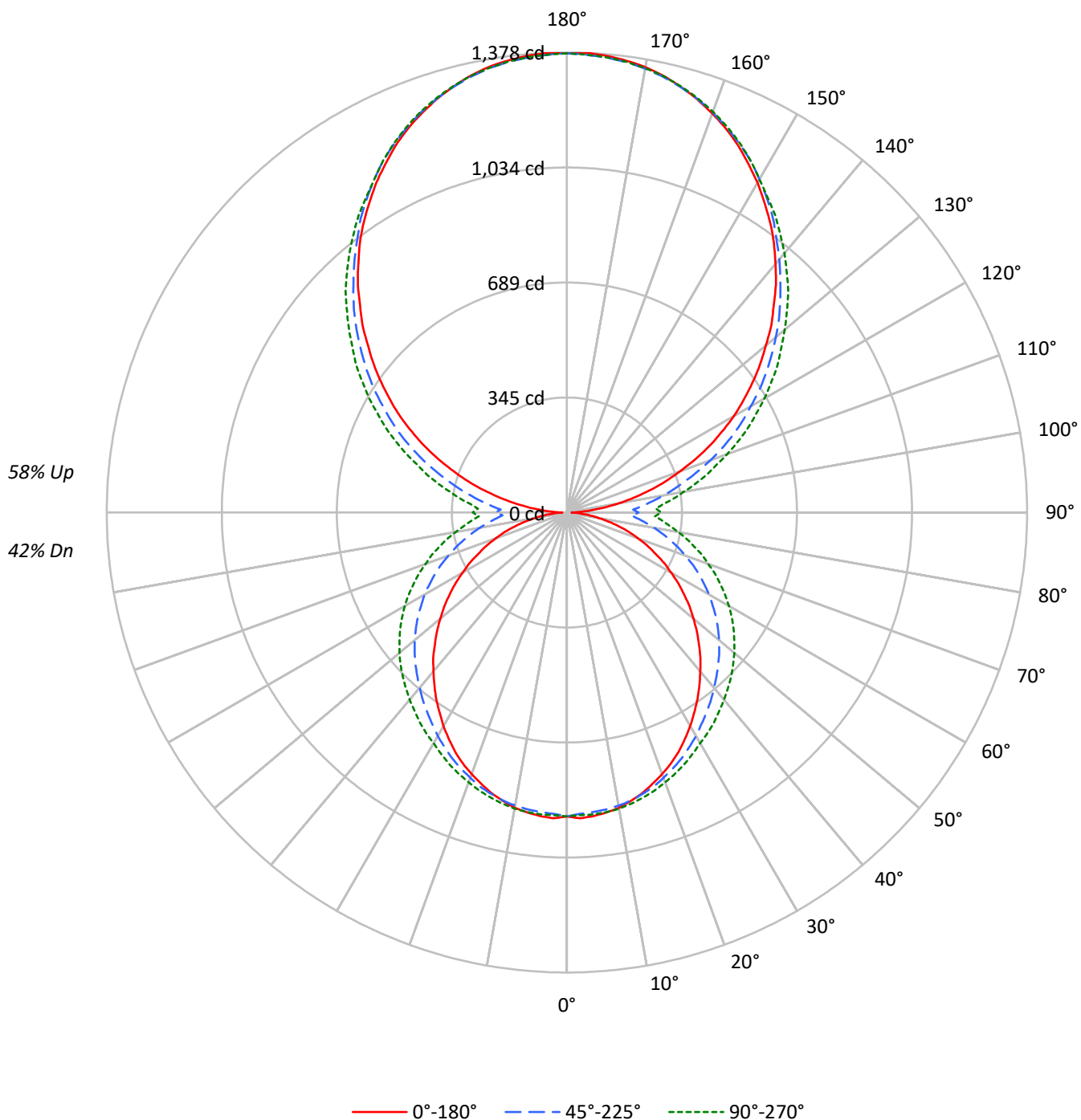
Lumens per Lamp: N/A
Luminaire Lumens: 7323.0 lumens
Efficiency: N/A
Efficacy: 89.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.31 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 81.8
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: P999000

CATALOG NUMBER: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1

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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	49	49	49
1	95	90	86	82	86	82	78	75	67	65	62	54	52	50	41	40	39
2	86	78	71	66	78	71	65	60	58	54	50	46	43	41	36	33	32
3	78	68	60	54	71	62	55	50	51	46	42	41	37	34	31	29	26
4	71	60	52	45	64	55	47	42	45	40	35	36	32	29	28	25	22
5	65	53	45	38	59	49	41	36	40	34	30	32	28	25	25	22	19
6	60	47	39	33	54	43	36	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	25	46	35	28	24	29	24	20	24	20	17	19	15	13
9	48	35	28	22	43	32	26	21	27	22	18	22	18	15	17	14	12
10	44	32	25	20	40	30	23	19	25	20	16	20	16	13	16	13	11

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: P999000

CATALOG NUMBER: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.3	1.2
10°-20°	247.5	3.4
20°-30°	375.0	5.1
30°-40°	456.6	6.2
40°-50°	491.3	6.7
50°-60°	477.1	6.5
60°-70°	416.7	5.7
70°-80°	320.7	4.4
80°-90°	218.7	3.0
90°-100°	233.3	3.2
100°-110°	378.7	5.2
110°-120°	534.4	7.3
120°-130°	648.6	8.9
130°-140°	700.1	9.6
140°-150°	673.0	9.2
150°-160°	562.1	7.7
160°-170°	372.8	5.1
170°-180°	130.3	1.8
0°-30°	708.7	9.7
0°-40°	1165.3	15.9
0°-60°	2133.7	29.1
0°-90°	3089.7	42.2
90°-120°	1146.4	15.7
90°-150°	3168.0	43.3
90°-180°	4233.0	57.8
0°-180°	7323.0	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	105	215	265	282	13
95°	71	145	226	276	290	76
105°	256	298	369	417	432	271
115°	470	491	548	586	598	464
125°	678	689	728	760	770	607
135°	876	888	904	930	937	677
145°	1061	1069	1076	1085	1087	663
155°	1213	1217	1220	1226	1222	558
165°	1320	1319	1319	1327	1321	372
175°	1373	1370	1368	1376	1369	130
180°	1376	1376	1376	1376	1376	

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CATALOG NUMBER: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1

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°	14.4	104.8	214.7	265.2	282.2
92.5°	37.4	116.6	198.3	250.8	266.6
95°	71.0	144.6	226.0	276.1	289.7
97.5°	110.2	177.4	258.6	307.4	323.2
100°	156.6	214.7	292.1	340.9	354.2
102.5°	204.1	254.6	330.5	379.2	392.5
105°	256.2	298.0	368.8	417.3	431.8
107.5°	309.6	345.9	411.8	457.9	466.6
110°	359.4	392.7	457.3	499.5	510.6

TEST NUMBER: P999000

CATALOG NUMBER: SA2XXDIP-B865D1080UB30-4F0-XX-W2A-D1

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	415.1	443.2	502.7	541.4	553.6
115°	469.7	491.1	548.1	586.5	597.6
117.5°	522.9	542.7	592.3	628.4	638.1
120°	577.5	592.0	635.5	672.4	683.4
122.5°	627.4	640.3	683.3	715.4	725.0
125°	678.2	688.7	727.5	759.6	770.3
127.5°	729.3	740.8	771.7	800.1	808.5
130°	776.9	790.7	816.1	845.5	851.3
132.5°	830.3	840.6	861.6	886.1	893.2
135°	875.5	888.2	903.7	930.3	937.4
137.5°	926.5	937.0	945.9	969.8	974.4
140°	971.8	981.0	989.4	1010.5	1013.8
142.5°	1018.2	1027.4	1030.9	1047.8	1049.8
145°	1061.1	1069.2	1076.1	1085.2	1087.2
147.5°	1100.5	1111.0	1115.6	1119.2	1118.6
150°	1141.2	1148.1	1152.8	1156.3	1152.8
152.5°	1177.1	1184.1	1189.9	1194.6	1189.9
155°	1213.1	1216.6	1220.1	1225.9	1222.4
157.5°	1244.5	1246.8	1249.1	1257.2	1251.4
160°	1272.3	1274.7	1275.8	1282.8	1278.1
162.5°	1297.9	1297.9	1299.0	1307.2	1301.4
165°	1319.9	1318.8	1318.8	1326.9	1321.1
167.5°	1339.7	1336.2	1336.2	1344.3	1338.5
170°	1354.8	1351.3	1350.1	1358.2	1351.3
172.5°	1365.2	1361.7	1360.6	1368.7	1361.7
175°	1373.3	1369.9	1367.5	1375.7	1368.7
177.5°	1378.0	1374.5	1372.2	1379.1	1372.2
180°	1375.7	1375.7	1375.7	1375.7	1375.7

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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	13.72	14.56	14.73	15.58	16.96	16.80	17.63	17.81	18.66	20.03
	3H	15.18	15.93	16.20	16.97	18.36	19.38	20.14	20.40	21.17	22.57
	4H	15.65	16.37	16.69	17.41	18.81	20.63	21.35	21.67	22.39	23.79
	6H	15.94	16.60	16.98	17.64	19.06	21.93	22.59	22.97	23.64	25.05
	8H	15.99	16.63	17.04	17.69	19.10	22.59	23.22	23.64	24.28	25.69
	12H	16.01	16.61	17.06	17.67	19.10	23.31	23.92	24.37	24.97	26.41
4H	2H	14.77	15.49	15.81	16.53	17.93	17.12	17.84	18.16	18.88	20.28
	3H	16.47	17.08	17.52	18.15	19.56	19.91	20.52	20.96	21.59	23.00
	4H	17.09	17.66	18.15	18.71	20.15	21.33	21.89	22.38	22.95	24.38
	6H	17.51	18.00	18.57	19.08	20.51	22.79	23.28	23.86	24.36	25.79
	8H	17.62	18.07	18.68	19.15	20.59	23.55	24.01	24.61	25.08	26.53
	12H	17.66	18.07	18.74	19.16	20.61	24.38	24.79	25.46	25.88	27.33
8H	4H	17.88	18.34	18.95	19.41	20.86	21.47	21.93	22.53	23.00	24.45
	6H	18.51	18.90	19.60	20.01	21.45	23.10	23.48	24.18	24.60	26.04
	8H	18.74	19.08	19.83	20.17	21.63	23.99	24.33	25.08	25.42	26.89
	12H	18.87	19.17	19.97	20.26	21.76	24.98	25.28	26.08	26.37	27.87
12H	4H	18.08	18.50	19.16	19.58	21.03	21.44	21.86	22.52	22.95	24.40
	6H	18.85	19.19	19.94	20.28	21.75	23.12	23.46	24.21	24.56	26.02
	8H	19.15	19.45	20.25	20.55	22.05	24.05	24.35	25.15	25.44	26.94