

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: P999121

Luminaire Tested: SA2XXDIP-B865D530UB30-4F0-XX-W2A-F4

Issue Date: 5/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P999121
REPORT IS A COMBINATION OF REPORTS P984870 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-F4
Description: Define 2 Direct/Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

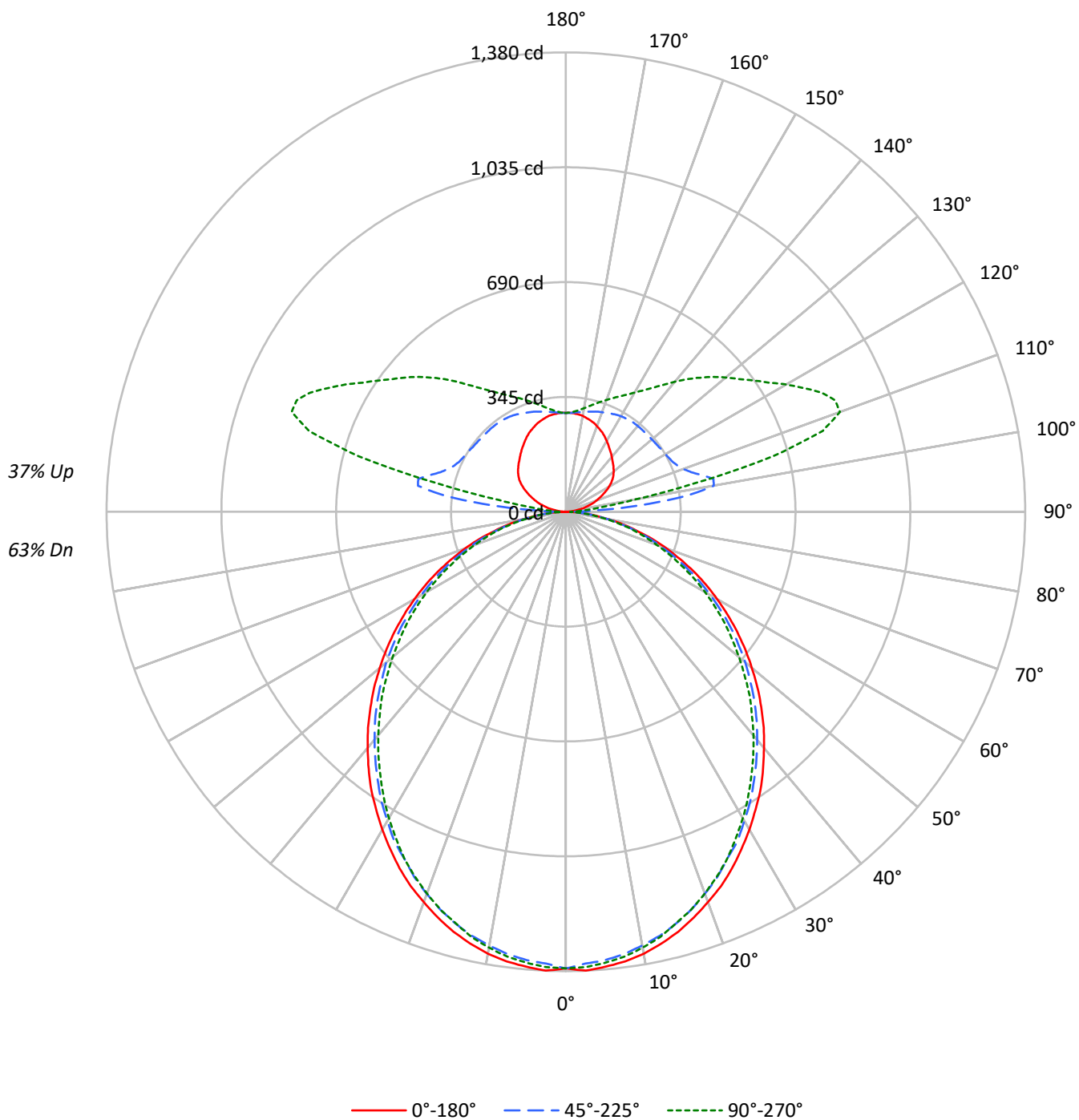
Lumens per Lamp: N/A
Luminaire Lumens: 5563.4 lumens
Efficiency: N/A
Efficacy: 89.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 4' x H: 0.1')
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	79	79	79	68	68	68
1	101	96	92	89	94	90	87	84	79	77	74	69	67	66	60	59	57
2	92	84	78	73	86	79	73	69	70	65	62	61	58	55	53	50	48
3	84	74	66	60	78	70	63	58	61	56	52	54	50	46	47	44	41
4	77	66	57	51	72	62	54	49	55	49	44	48	43	40	42	38	35
5	70	58	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31
6	65	53	44	38	61	50	42	37	44	38	33	39	34	30	34	30	27
7	60	48	39	34	56	45	38	32	40	34	30	36	31	27	31	27	24
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22
9	52	40	32	27	49	38	30	26	34	28	24	30	25	22	27	23	20
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21715	21715	21715
5°	21750	20698	20551
10°	21572	19755	19363
15°	21257	18804	18112
20°	20830	17770	16928
25°	20403	16691	15747
30°	19868	15677	14505
35°	19364	14605	13287
40°	18739	13549	12135
45°	18121	12501	11007
50°	17443	11436	9834
55°	16728	10296	8724
60°	15931	9062	7571
65°	15052	7808	6357
70°	13936	6435	5134
75°	12396	4961	3964
80°	10531	3370	2550
85°	7642	1567	1086

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18121 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	2.3
10°-20°	363.3	6.5
20°-30°	533.8	9.6
30°-40°	620.0	11.1
40°-50°	619.2	11.1
50°-60°	540.0	9.7
60°-70°	399.1	7.2
70°-80°	225.8	4.1
80°-90°	61.5	1.1
90°-100°	120.5	2.2
100°-110°	407.2	7.3
110°-120°	428.0	7.7
120°-130°	352.0	6.3
130°-140°	282.8	5.1
140°-150°	213.7	3.8
150°-160°	150.2	2.7
160°-170°	88.4	1.6
170°-180°	28.8	0.5
0°-30°	1026.2	18.4
0°-40°	1646.2	29.6
0°-60°	2805.4	50.4
0°-90°	3491.9	62.8
90°-120°	955.6	17.2
90°-150°	1804.1	32.4
90°-180°	2071.0	37.2
0°-180°	5563.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1372	1366	1352	1362	1360	130
15°	1306	1298	1281	1286	1279	368
25°	1182	1171	1149	1152	1149	544
35°	1020	1006	985	977	971	637
45°	830	820	801	786	781	640
55°	628	620	604	588	582	561
65°	423	416	402	390	384	419
75°	222	219	212	204	207	236
85°	54	53	51	48	46	60
90°	1	8	19	19	19	5
95°	20	49	224	85	65	21
105°	70	105	423	757	644	74
115°	123	155	354	731	847	122
125°	171	203	340	592	687	152
135°	201	240	336	498	570	155
145°	230	264	335	416	455	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°	1371.8	1371.8	1371.8	1371.8	1371.8
2.5°	1379.7	1373.1	1358.6	1371.8	1369.1
5°	1371.8	1366.5	1352.0	1362.5	1359.9
7.5°	1362.5	1354.6	1340.1	1350.7	1348.0
10°	1348.0	1338.8	1323.0	1333.5	1329.6
12.5°	1328.2	1320.3	1304.5	1311.1	1308.5
15°	1305.8	1297.9	1280.8	1286.0	1279.4
17.5°	1278.1	1270.2	1253.1	1259.7	1253.1
20°	1247.8	1239.9	1221.4	1225.4	1220.1
22.5°	1217.4	1205.6	1188.4	1188.4	1185.8
25°	1181.8	1171.3	1148.9	1151.5	1148.9
27.5°	1142.3	1133.0	1115.9	1111.9	1105.3
30°	1102.7	1092.1	1072.4	1068.4	1063.1
32.5°	1060.5	1052.6	1031.5	1023.6	1018.3
35°	1019.6	1006.4	985.3	977.4	970.8
37.5°	973.4	961.6	940.5	931.2	924.6
40°	925.9	915.4	894.3	882.4	877.1
42.5°	879.8	869.2	848.1	834.9	827.0
45°	829.7	820.4	800.6	786.1	780.9
47.5°	780.9	771.6	750.5	736.0	728.1
50°	729.4	722.8	704.4	685.9	679.3
52.5°	679.3	670.1	652.9	638.4	629.2
55°	627.8	619.9	604.1	588.3	581.7
57.5°	576.4	569.8	552.7	536.8	531.6
60°	525.0	519.7	501.2	486.7	482.8
62.5°	474.8	465.6	452.4	439.2	434.0
65°	423.4	415.5	402.3	390.4	383.8
67.5°	370.6	364.0	352.2	342.9	337.7
70°	321.8	316.6	304.7	295.5	290.2
72.5°	271.7	266.4	259.8	250.6	246.7
75°	221.6	219.0	212.4	204.4	207.1
77.5°	176.7	171.5	168.8	164.9	160.9
80°	131.9	130.6	127.9	124.0	121.3
82.5°	89.7	89.7	88.4	83.1	83.1
85°	54.1	52.8	51.4	47.5	46.2
87.5°	23.7	21.1	18.5	14.5	13.2
90°	0.6	7.8	19.4	18.6	18.9
92.5°	8.6	27.2	88.0	40.6	34.9
95°	20.0	49.2	224.0	84.6	65.1
97.5°	29.7	64.8	365.1	169.7	109.1
100°	44.0	79.4	451.4	338.0	204.5
102.5°	57.1	92.6	454.2	571.4	398.8
105°	69.7	105.1	423.4	756.8	643.9
107.5°	83.4	117.7	394.8	823.9	809.1
110°	97.1	130.6	375.4	813.0	876.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	109.7	142.9	362.8	776.2	875.3
115°	122.8	155.1	354.2	731.0	847.3
117.5°	136.6	167.4	349.7	687.9	805.1
120°	149.1	179.4	345.7	649.4	764.5
122.5°	161.1	191.7	343.4	619.4	722.2
125°	171.4	202.8	340.5	592.2	687.4
127.5°	180.0	213.4	338.8	569.1	654.8
130°	187.4	222.8	337.7	545.6	627.9
132.5°	194.3	232.0	337.1	521.3	599.9
135°	201.1	240.0	336.5	497.7	569.7
137.5°	207.4	246.8	336.5	473.6	540.5
140°	214.8	253.1	336.0	452.6	510.2
142.5°	222.3	258.2	336.0	432.2	479.9
145°	229.7	264.0	334.8	415.7	454.8
147.5°	237.7	268.6	333.1	401.1	432.5
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	17.03	18.02	17.87	18.88	19.96	17.81	18.80	18.65	19.66	20.74
	3H	18.38	19.27	19.23	20.14	21.24	19.45	20.34	20.30	21.21	22.31
	4H	18.79	19.63	19.66	20.50	21.62	20.05	20.88	20.91	21.76	22.88
	6H	19.01	19.79	19.89	20.67	21.80	20.46	21.23	21.34	22.11	23.24
	8H	19.05	19.78	19.94	20.69	21.81	20.57	21.30	21.46	22.21	23.33
	12H	19.04	19.75	19.94	20.64	21.80	20.62	21.32	21.51	22.22	23.37
4H	2H	17.51	18.35	18.39	19.23	20.35	18.16	19.00	19.03	19.88	20.99
	3H	19.04	19.74	19.93	20.65	21.78	19.95	20.65	20.83	21.56	22.69
	4H	19.55	20.19	20.45	21.10	22.25	20.64	21.28	21.53	22.18	23.34
	6H	19.86	20.42	20.78	21.35	22.50	21.14	21.69	22.05	22.62	23.78
	8H	19.92	20.44	20.84	21.36	22.54	21.29	21.80	22.20	22.73	23.90
	12H	19.93	20.40	20.86	21.34	22.51	21.35	21.82	22.29	22.76	23.94
8H	4H	19.74	20.26	20.65	21.18	22.35	20.73	21.25	21.65	22.17	23.34
	6H	20.13	20.56	21.07	21.52	22.69	21.31	21.73	22.25	22.70	23.87
	8H	20.23	20.61	21.18	21.57	22.76	21.50	21.87	22.45	22.83	24.02
	12H	20.27	20.60	21.22	21.55	22.79	21.60	21.93	22.55	22.88	24.12
12H	4H	19.73	20.19	20.66	21.14	22.31	20.70	21.17	21.64	22.11	23.29
	6H	20.15	20.53	21.10	21.48	22.67	21.30	21.68	22.25	22.63	23.82
	8H	20.27	20.60	21.22	21.55	22.79	21.50	21.83	22.45	22.78	24.02