

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: P997668

Luminaire Tested: SA2XXDP-B865DB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997668
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-10)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B865DB2750-4F0-XX-W2A-F_3000K
Description: Define 2 Direct Recessed with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

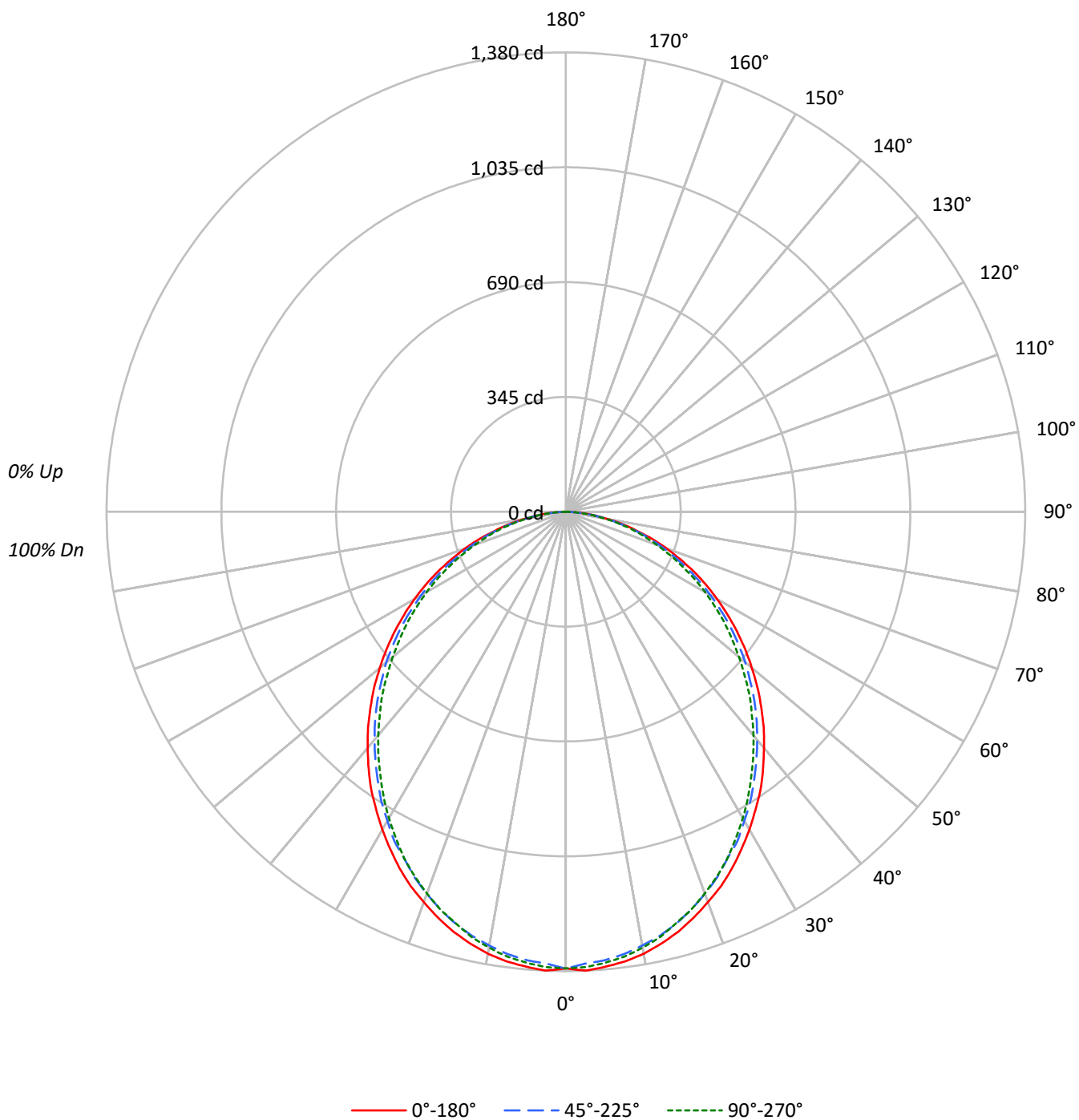
Lumens per Lamp: N/A
Luminaire Lumens: 3490.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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

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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	0		
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60		
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51		
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45		
6	71	58	49	43	69	57	48	42	55	48	42	53	47	42	52	46	41	39		
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35		
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31		
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28		
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	32	27	26		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21715	21715	21715
5°	21798	21483	21608
10°	21667	21265	21371
15°	21399	20989	20966
20°	21019	20575	20553
25°	20641	20066	20066
30°	20155	19601	19431
35°	19703	19040	18760
40°	19132	18480	18124
45°	18574	17922	17481
50°	17962	17347	16728
55°	17326	16672	16053
60°	16621	15867	15285
65°	15859	15068	14375
70°	14893	14102	13431
75°	13553	12990	12666
80°	12024	11659	11057
85°	9826	9335	8391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 18574 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.1	3.7
10°-20°	363.3	10.4
20°-30°	533.8	15.3
30°-40°	620.0	17.8
40°-50°	619.2	17.7
50°-60°	540.0	15.5
60°-70°	399.1	11.4
70°-80°	225.8	6.5
80°-90°	59.6	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1026.2	29.4
0°-40°	1646.2	47.2
0°-60°	2805.4	80.4
0°-90°	3490.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3490.0	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	64
90°	0	0	0	0	0	

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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°	0.0	0.0	0.0	0.0	0.0

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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	21.98	23.59	22.34	23.90	24.22	21.53	23.14	21.90	23.46	23.77
	3H	23.73	25.18	24.10	25.51	25.87	23.24	24.69	23.61	25.02	25.38
	4H	24.37	25.74	24.77	26.09	26.47	23.88	25.25	24.28	25.59	25.97
	6H	24.84	26.11	25.25	26.47	26.87	24.34	25.61	24.75	25.97	26.36
	8H	24.98	26.20	25.41	26.58	26.98	24.48	25.69	24.91	26.08	26.48
	12H	25.07	26.24	25.50	26.62	27.05	24.56	25.72	24.99	26.10	26.53
4H	2H	22.54	23.91	22.93	24.25	24.63	22.18	23.55	22.58	23.90	24.28
	3H	24.51	25.66	24.92	26.06	26.46	24.11	25.25	24.51	25.65	26.05
	4H	25.29	26.32	25.72	26.74	27.17	24.86	25.90	25.30	26.31	26.75
	6H	25.88	26.79	26.34	27.23	27.69	25.45	26.36	25.91	26.80	27.25
	8H	26.07	26.92	26.53	27.36	27.83	25.64	26.48	26.10	26.92	27.39
	12H	26.21	26.97	26.69	27.44	27.91	25.75	26.51	26.23	26.99	27.46
8H	4H	25.56	26.41	26.02	26.85	27.32	25.19	26.03	25.65	26.48	26.94
	6H	26.28	26.98	26.77	27.47	27.94	25.89	26.60	26.39	27.09	27.56
	8H	26.54	27.17	27.05	27.67	28.16	26.14	26.77	26.65	27.28	27.77
	12H	26.74	27.29	27.24	27.78	28.34	26.32	26.88	26.83	27.37	27.93
12H	4H	25.59	26.35	26.07	26.82	27.29	25.22	25.98	25.70	26.46	26.93
	6H	26.32	26.95	26.83	27.46	27.95	25.95	26.58	26.46	27.09	27.58
	8H	26.64	27.19	27.14	27.68	28.24	26.26	26.81	26.76	27.31	27.87