

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: P997548

Luminaire Tested: SA2XXDP-B1005DB2750-4F0-XX-W2A-F_3000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997548
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-B1005DB2750-4F0-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

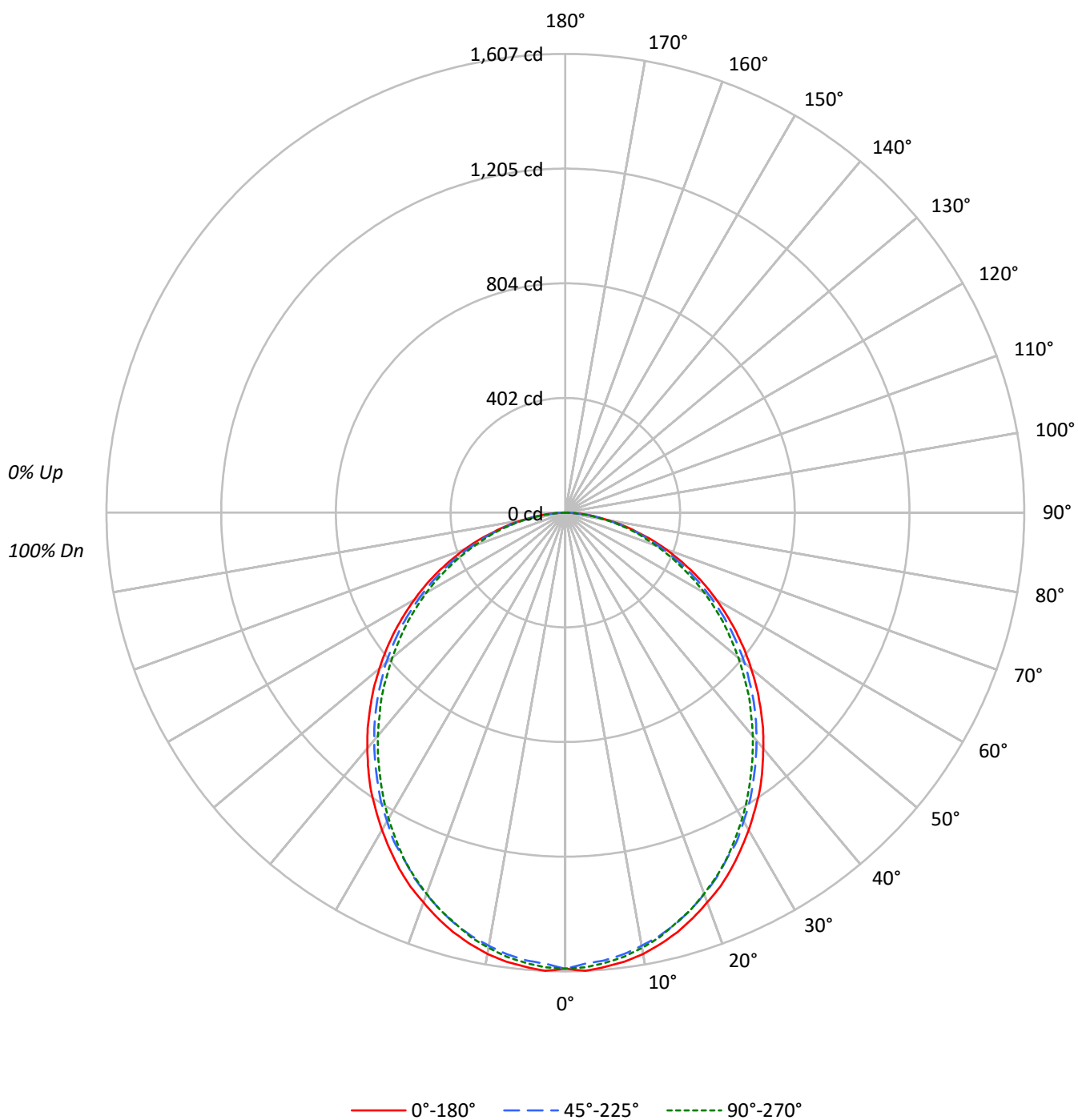
Lumens per Lamp: N/A
Luminaire Lumens: 4064.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.16 / 1.29
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
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			0
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°	25286	25286	25286
5°	25382	25015	25163
10°	25231	24763	24885
15°	24919	24441	24416
20°	24476	23959	23934
25°	24036	23366	23366
30°	23471	22824	22628
35°	22943	22172	21846
40°	22280	21519	21106
45°	21627	20870	20356
50°	20917	20198	19479
55°	20177	19415	18695
60°	19353	18479	17798
65°	18465	17548	16743
70°	17346	16421	15639
75°	15779	15125	14746
80°	14002	13582	12881
85°	11442	10879	9771

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 21627 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	150.3	3.7
10°-20°	423.0	10.4
20°-30°	621.6	15.3
30°-40°	722.0	17.8
40°-50°	721.1	17.7
50°-60°	628.8	15.5
60°-70°	464.8	11.4
70°-80°	263.0	6.5
80°-90°	69.4	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°	1195.0	29.4
0°-40°	1917.0	47.2
0°-60°	3266.8	80.4
0°-90°	4064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4064.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1597	1591	1574	1587	1584	152
15°	1521	1511	1491	1498	1490	428
25°	1376	1364	1338	1341	1338	633
35°	1187	1172	1147	1138	1130	741
45°	966	955	932	915	909	746
55°	731	722	704	685	677	654
65°	493	484	468	455	447	487
75°	258	255	247	238	241	275
85°	63	61	60	55	54	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1597.4	1597.4	1597.4	1597.4	1597.4
2.5°	1606.6	1598.9	1582.0	1597.4	1594.3
5°	1597.4	1591.2	1574.3	1586.6	1583.6
7.5°	1586.6	1577.4	1560.5	1572.8	1569.7
10°	1569.7	1559.0	1540.6	1552.8	1548.2
12.5°	1546.7	1537.5	1519.1	1526.7	1523.7
15°	1520.6	1511.4	1491.4	1497.5	1489.9
17.5°	1488.3	1479.1	1459.1	1466.8	1459.1
20°	1453.0	1443.8	1422.3	1426.9	1420.8
22.5°	1417.7	1403.9	1383.9	1383.9	1380.8
25°	1376.2	1363.9	1337.8	1340.9	1337.8
27.5°	1330.1	1319.4	1299.4	1294.8	1287.1
30°	1284.1	1271.8	1248.7	1244.1	1238.0
32.5°	1234.9	1225.7	1201.1	1191.9	1185.8
35°	1187.3	1171.9	1147.4	1138.1	1130.5
37.5°	1133.5	1119.7	1095.1	1084.4	1076.7
40°	1078.2	1065.9	1041.4	1027.5	1021.4
42.5°	1024.5	1012.2	987.6	972.3	963.0
45°	966.1	955.4	932.3	915.4	909.3
47.5°	909.3	898.5	874.0	857.1	847.8
50°	849.4	841.7	820.2	798.7	791.0
52.5°	791.0	780.3	760.3	743.4	732.6
55°	731.1	721.9	703.5	685.0	677.4
57.5°	671.2	663.5	643.6	625.1	619.0
60°	611.3	605.2	583.7	566.8	562.2
62.5°	552.9	542.2	526.8	511.5	505.3
65°	493.0	483.8	468.5	454.6	447.0
67.5°	431.6	423.9	410.1	399.3	393.2
70°	374.8	368.6	354.8	344.1	337.9
72.5°	316.4	310.3	302.6	291.8	287.2
75°	258.0	255.0	247.3	238.1	241.1
77.5°	205.8	199.7	196.6	192.0	187.4
80°	153.6	152.1	149.0	144.4	141.3
82.5°	104.4	104.4	102.9	96.8	96.8
85°	63.0	61.4	59.9	55.3	53.8
87.5°	27.6	24.6	21.5	16.9	15.4
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	22.50	24.12	22.87	24.43	24.74	22.06	23.67	22.43	23.99	24.30
	3H	24.26	25.71	24.63	26.04	26.40	23.76	25.22	24.14	25.55	25.91
	4H	24.90	26.27	25.30	26.62	26.99	24.41	25.78	24.80	26.12	26.50
	6H	25.37	26.64	25.78	27.00	27.39	24.87	26.14	25.28	26.50	26.89
	8H	25.51	26.72	25.94	27.11	27.51	25.01	26.22	25.44	26.61	27.01
	12H	25.60	26.76	26.03	27.15	27.57	25.09	26.25	25.52	26.63	27.06
4H	2H	23.07	24.43	23.46	24.78	25.16	22.71	24.08	23.11	24.43	24.81
	3H	25.04	26.19	25.45	26.58	26.98	24.63	25.78	25.04	26.18	26.58
	4H	25.82	26.85	26.25	27.27	27.70	25.39	26.43	25.82	26.84	27.28
	6H	26.41	27.32	26.87	27.76	28.22	25.98	26.89	26.44	27.33	27.78
	8H	26.60	27.45	27.06	27.89	28.36	26.17	27.01	26.63	27.45	27.92
	12H	26.74	27.50	27.22	27.97	28.44	26.28	27.04	26.76	27.52	27.99
8H	4H	26.09	26.94	26.55	27.38	27.85	25.72	26.56	26.18	27.01	27.47
	6H	26.81	27.51	27.30	28.00	28.47	26.42	27.13	26.92	27.62	28.09
	8H	27.06	27.69	27.57	28.20	28.69	26.67	27.30	27.18	27.81	28.30
	12H	27.26	27.82	27.77	28.31	28.87	26.85	27.41	27.36	27.90	28.46
12H	4H	26.12	26.88	26.60	27.35	27.82	25.75	26.51	26.23	26.99	27.46
	6H	26.85	27.48	27.36	27.99	28.48	26.48	27.11	26.99	27.62	28.11
	8H	27.16	27.72	27.67	28.21	28.77	26.79	27.34	27.29	27.83	28.40