

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: P997699

Luminaire Tested: SA2XXRDP-B1005DB35-4F0-XX-W2A-F

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997699
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-24)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXRDP-B1005DB35-4F0-XX-W2A-F
Description: Define 2 Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

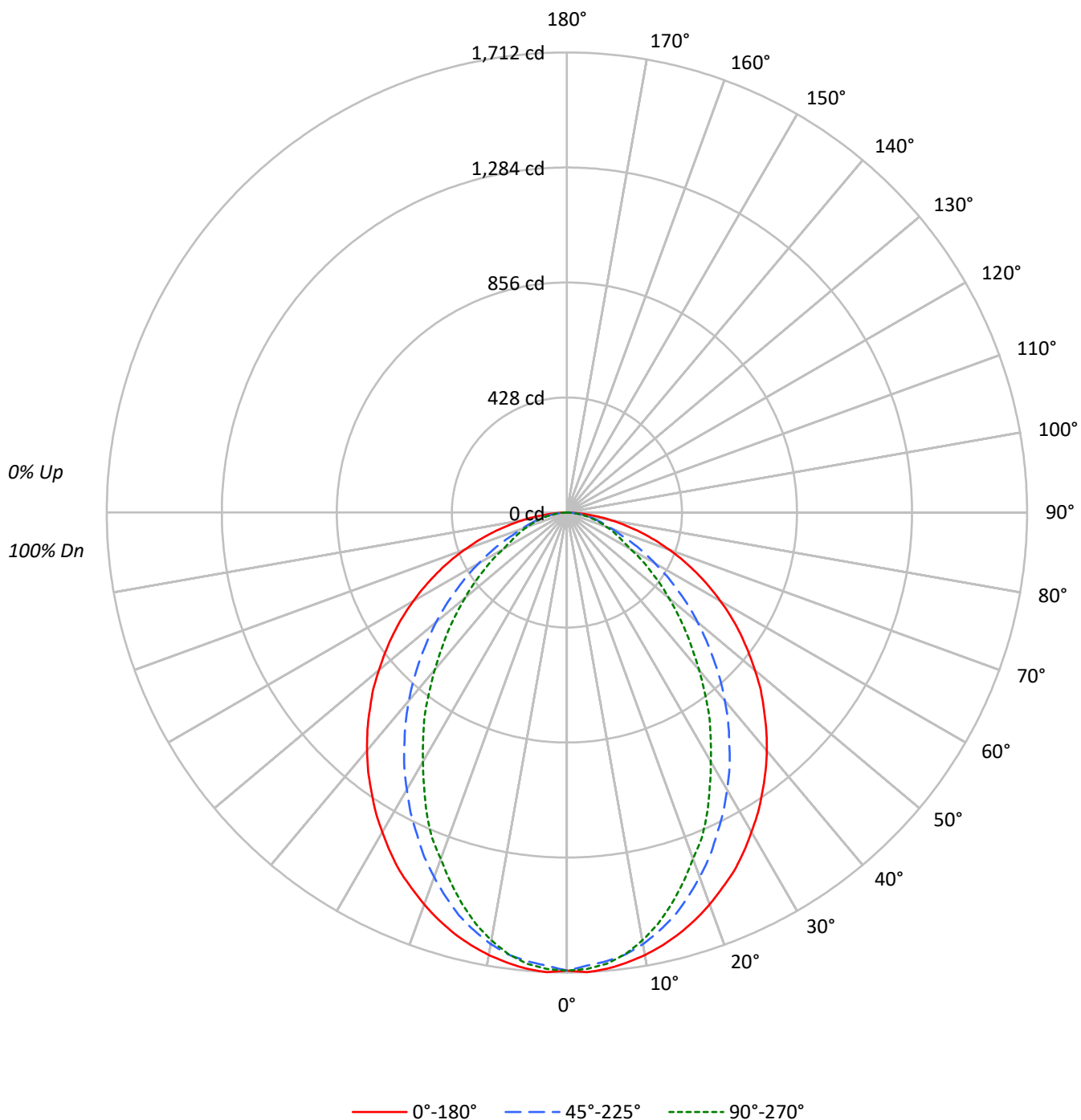
Lumens per Lamp: N/A
Luminaire Lumens: 3506.0 lumens
Efficiency: N/A
Efficacy: 57.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	57	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51	45	41	39
8	64	51	43	38	62	51	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34		44	38	34		44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26984	26984	26984
5°	27087	26647	26793
10°	26880	26211	25988
15°	26571	25434	24701
20°	26144	24324	23103
25°	25706	23065	21556
30°	25096	21769	19570
35°	24505	20362	17828
40°	23910	18903	15812
45°	23208	17269	13987
50°	22491	15615	12195
55°	21755	13837	10473
60°	20904	11967	8693
65°	19934	10053	7918
70°	18777	8284	7285
75°	17363	7547	6795
80°	15333	6755	6190
85°	12041	5321	5321

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 23208 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	159.8	4.6
10°-20°	438.6	12.5
20°-30°	615.8	17.6
30°-40°	671.2	19.1
40°-50°	616.9	17.6
50°-60°	484.5	13.8
60°-70°	315.4	9.0
70°-80°	162.4	4.6
80°-90°	41.5	1.2
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°	1214.2	34.6
0°-40°	1885.4	53.8
0°-60°	2986.8	85.2
0°-90°	3506.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3506.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1705	1705	1705	1705	1705	
5°	1705	1697	1677	1691	1686	162
15°	1621	1604	1552	1523	1507	457
25°	1472	1422	1321	1257	1234	677
35°	1268	1190	1054	956	923	794
45°	1037	933	771	662	625	801
55°	788	668	501	409	380	704
65°	532	407	268	216	211	528
75°	284	176	123	113	111	300
85°	66	34	29	29	29	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1704.7	1704.7	1704.7	1704.7	1704.7
2.5°	1712.4	1704.7	1687.8	1703.2	1700.1
5°	1704.7	1697.0	1677.0	1690.8	1686.2
7.5°	1690.8	1681.6	1660.0	1666.2	1658.4
10°	1672.3	1661.5	1630.7	1626.1	1616.8
12.5°	1649.2	1635.3	1593.7	1584.4	1567.4
15°	1621.4	1604.5	1552.0	1522.7	1507.3
17.5°	1589.0	1564.3	1499.5	1465.6	1440.9
20°	1552.0	1521.1	1444.0	1405.4	1371.5
22.5°	1511.9	1476.4	1386.9	1334.5	1311.3
25°	1471.8	1422.4	1320.6	1257.3	1234.2
27.5°	1424.0	1371.5	1258.9	1186.4	1150.9
30°	1373.0	1314.4	1191.0	1112.3	1070.7
32.5°	1323.7	1252.7	1126.2	1033.6	995.1
35°	1268.1	1189.5	1053.7	956.5	922.6
37.5°	1214.1	1129.3	985.8	879.4	840.8
40°	1157.1	1064.5	914.8	805.3	765.2
42.5°	1098.4	999.7	843.9	729.7	691.1
45°	1036.7	933.4	771.4	661.8	624.8
47.5°	978.1	868.6	701.9	592.4	558.5
50°	913.3	803.8	634.1	527.6	495.2
52.5°	850.1	734.3	569.3	467.5	438.1
55°	788.3	668.0	501.4	408.8	379.5
57.5°	725.1	601.7	441.2	354.8	330.1
60°	660.3	536.9	378.0	299.3	274.6
62.5°	597.0	473.6	324.0	249.9	237.6
65°	532.2	407.3	268.4	216.0	211.4
67.5°	470.5	345.6	216.0	189.8	185.1
70°	405.7	285.4	179.0	163.5	157.4
72.5°	344.0	229.9	149.6	137.3	134.2
75°	283.9	175.9	123.4	112.6	111.1
77.5°	223.7	125.0	97.2	91.0	87.9
80°	168.2	89.5	74.1	67.9	67.9
82.5°	117.2	60.2	50.9	47.8	47.8
85°	66.3	33.9	29.3	29.3	29.3
87.5°	24.7	12.3	12.3	10.8	10.8
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	22.68	24.21	23.05	24.52	24.83	18.64	20.16	19.01	20.48	20.79
	3H	24.45	25.81	24.83	26.14	26.50	19.91	21.27	20.29	21.60	21.96
	4H	25.12	26.40	25.52	26.74	27.12	20.41	21.69	20.81	22.04	22.42
	6H	25.60	26.79	26.02	27.15	27.55	20.79	21.97	21.20	22.34	22.73
	8H	25.77	26.90	26.20	27.29	27.69	20.92	22.04	21.34	22.43	22.83
	12H	25.87	26.95	26.30	27.33	27.76	21.00	22.08	21.43	22.46	22.89
4H	2H	22.79	24.07	23.19	24.42	24.80	19.34	20.62	19.74	20.97	21.35
	3H	24.72	25.78	25.13	26.18	26.58	20.78	21.85	21.19	22.25	22.65
	4H	25.47	26.43	25.90	26.84	27.28	21.38	22.34	21.81	22.75	23.19
	6H	26.06	26.89	26.52	27.34	27.80	21.87	22.70	22.33	23.14	23.60
	8H	26.28	27.05	26.74	27.50	27.97	22.03	22.81	22.50	23.25	23.72
	12H	26.43	27.13	26.91	27.60	28.07	22.15	22.84	22.63	23.32	23.79
8H	4H	25.49	26.27	25.96	26.72	27.18	21.74	22.51	22.20	22.96	23.42
	6H	26.13	26.78	26.63	27.27	27.74	22.32	22.96	22.82	23.46	23.93
	8H	26.38	26.96	26.90	27.47	27.96	22.54	23.12	23.06	23.63	24.12
	12H	26.59	27.10	27.10	27.59	28.15	22.72	23.23	23.23	23.72	24.29
12H	4H	25.48	26.17	25.96	26.65	27.12	21.78	22.47	22.26	22.95	23.42
	6H	26.11	26.69	26.63	27.20	27.69	22.39	22.96	22.90	23.47	23.96
	8H	26.40	26.91	26.91	27.40	27.96	22.66	23.17	23.17	23.66	24.23