

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: P987747

Luminaire Tested: S122R3DR-B290DB2750-4F0-XX-W2A-F_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987747
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: S122R3DR-B290DB2750-4F0-XX-W2A-F_3500K
Description: Define 2 3in Regressed Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

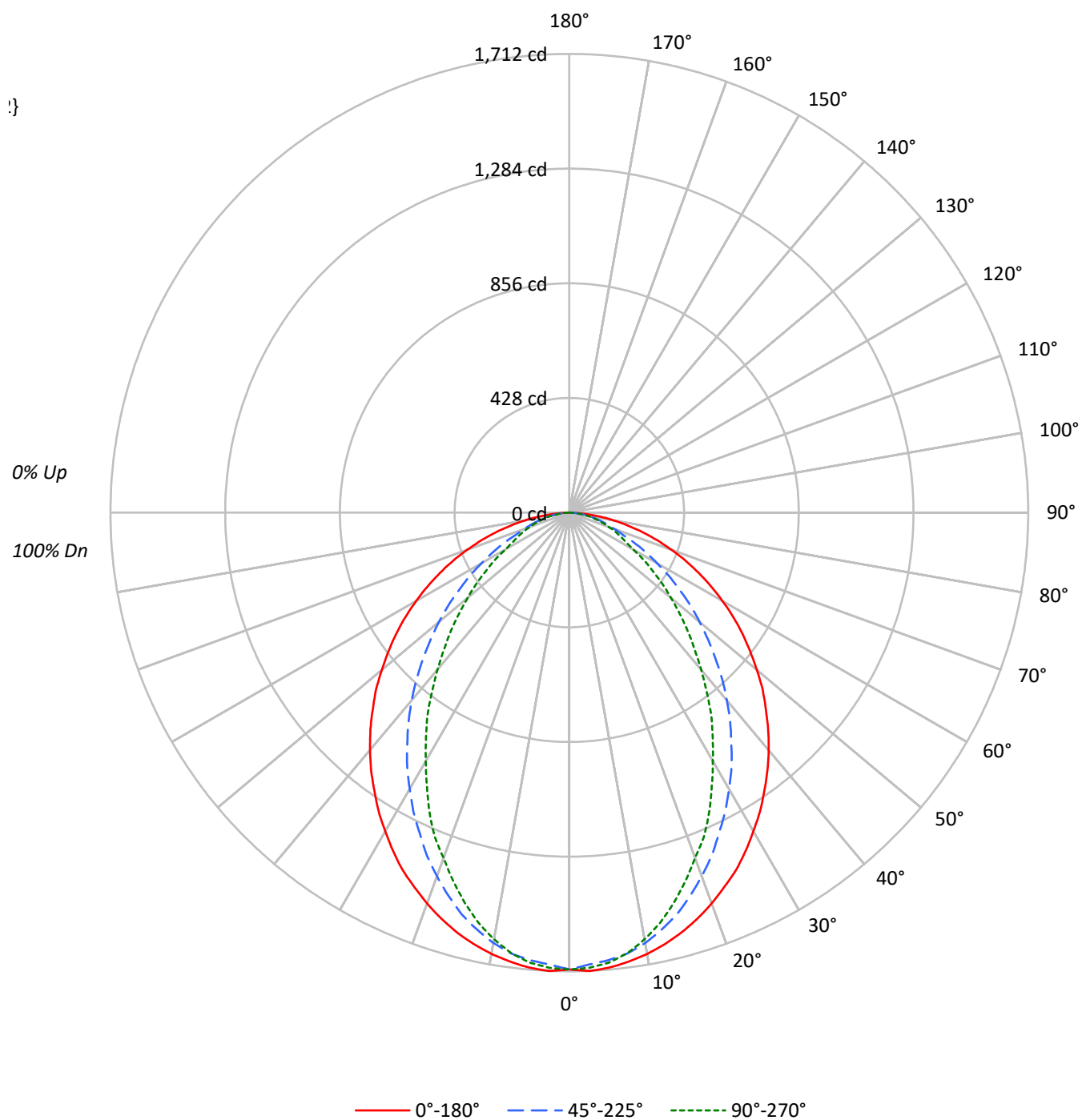
Lumens per Lamp: N/A
Luminaire Lumens: 3506.0 lumens
Efficiency: N/A
Efficacy: 57.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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

(END OF REPORT)