

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: P987748

Luminaire Tested: S122R3DR-B290DB2750-4F0-XX-W2A-F_4000K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987748
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_4000K
Description: Define 2 3in Regressed Direct Recessed with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951
Light Source: -
Ballast/Driver: -

Summary

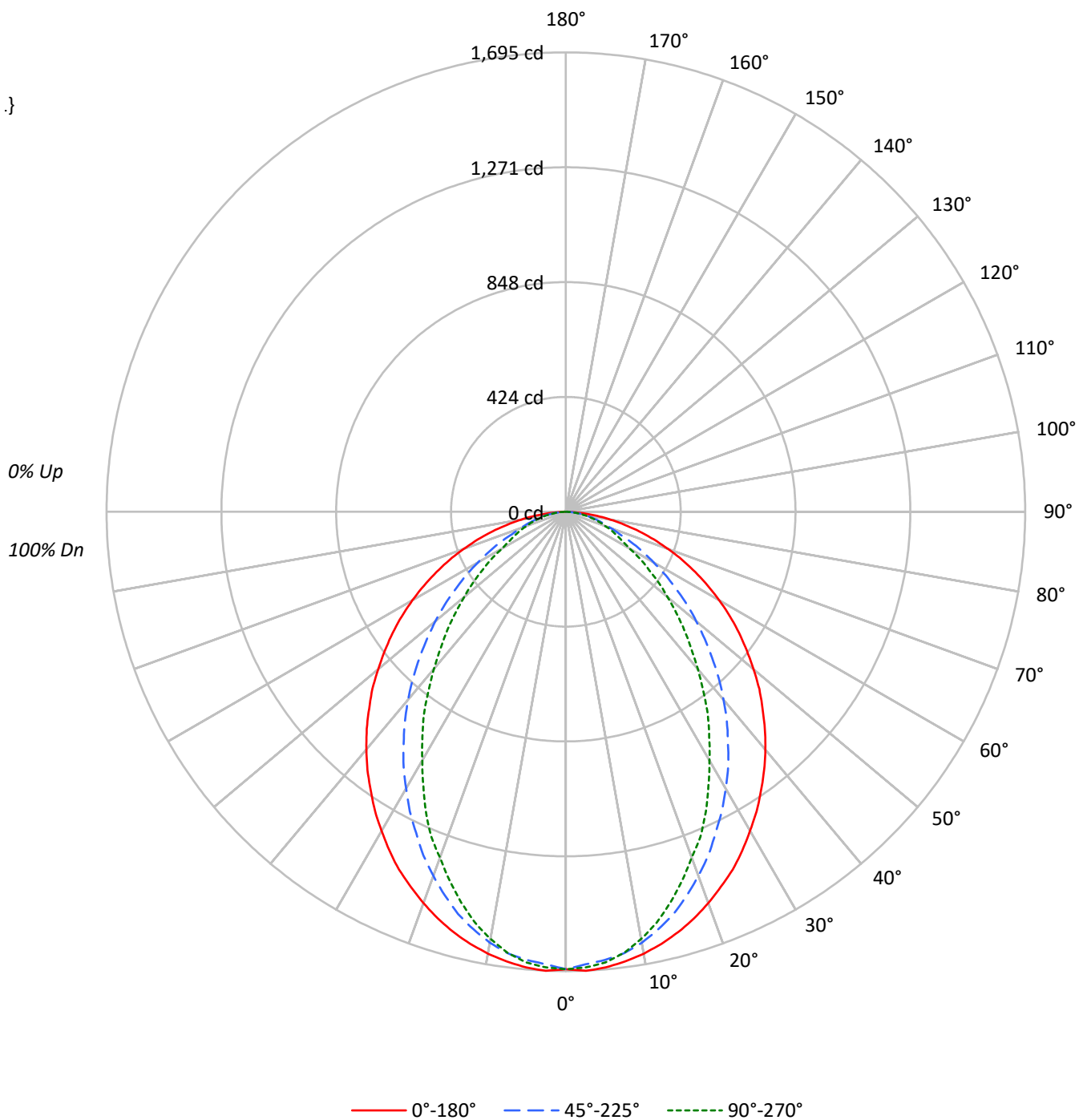
Lumens per Lamp: N/A
Luminaire Lumens: 3471.0 lumens
Efficiency: N/A
Efficacy: 56.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

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°	26715	26715	26715
5°	26817	26380	26526
10°	26611	25949	25729
15°	26306	25180	24454
20°	25883	24082	22872
25°	25449	22835	21341
30°	24845	21552	19375
35°	24261	20159	17651
40°	23670	18715	15655
45°	22977	17096	13848
50°	22267	15458	12074
55°	21540	13699	10368
60°	20695	11847	8608
65°	19735	9956	7836
70°	18591	8201	7211
75°	17186	7474	6728
80°	15178	6682	6126
85°	11932	5267	5267

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 22977 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.2	4.6
10°-20°	434.2	12.5
20°-30°	609.6	17.6
30°-40°	664.5	19.1
40°-50°	610.8	17.6
50°-60°	479.7	13.8
60°-70°	312.2	9.0
70°-80°	160.7	4.6
80°-90°	41.0	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°	1202.0	34.6
0°-40°	1866.6	53.8
0°-60°	2957.0	85.2
0°-90°	3471.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1688	1688	1688	1688	1688	
5°	1688	1680	1660	1674	1669	160
15°	1605	1588	1536	1508	1492	452
25°	1457	1408	1307	1245	1222	670
35°	1256	1178	1043	947	913	786
45°	1026	924	764	655	619	793
55°	780	661	496	405	376	697
65°	527	403	266	214	209	522
75°	281	174	122	112	110	297
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°	1687.7	1687.7	1687.7	1687.7	1687.7
2.5°	1695.4	1687.7	1670.9	1686.2	1683.1
5°	1687.7	1680.1	1660.2	1674.0	1669.4
7.5°	1674.0	1664.8	1643.4	1649.5	1641.9
10°	1655.6	1644.9	1614.4	1609.8	1600.7
12.5°	1632.7	1619.0	1577.7	1568.6	1551.8
15°	1605.2	1588.4	1536.5	1507.5	1492.2
17.5°	1573.2	1548.7	1484.6	1451.0	1426.5
20°	1536.5	1506.0	1429.6	1391.4	1357.8
22.5°	1496.8	1461.7	1373.1	1321.2	1298.2
25°	1457.1	1408.2	1307.4	1244.8	1221.9
27.5°	1409.7	1357.8	1246.3	1174.5	1139.4
30°	1359.3	1301.3	1179.1	1101.2	1060.0
32.5°	1310.5	1240.2	1115.0	1023.3	985.1
35°	1255.5	1177.6	1043.2	947.0	913.4
37.5°	1202.0	1118.0	976.0	870.6	832.4
40°	1145.5	1053.9	905.7	797.3	757.6
42.5°	1087.5	989.7	835.5	722.4	684.2
45°	1026.4	924.0	763.7	655.2	618.6
47.5°	968.3	859.9	694.9	586.5	552.9
50°	904.2	795.7	627.7	522.4	490.3
52.5°	841.6	727.0	563.6	462.8	433.8
55°	780.5	661.3	496.4	404.7	375.7
57.5°	717.9	595.7	436.8	351.3	326.9
60°	653.7	531.5	374.2	296.3	271.9
62.5°	591.1	468.9	320.7	247.4	235.2
65°	526.9	403.2	265.8	213.8	209.2
67.5°	465.8	342.1	213.8	187.9	183.3
70°	401.7	282.6	177.2	161.9	155.8
72.5°	340.6	227.6	148.2	135.9	132.9
75°	281.0	174.1	122.2	111.5	110.0
77.5°	221.5	123.7	96.2	90.1	87.1
80°	166.5	88.6	73.3	67.2	67.2
82.5°	116.1	59.6	50.4	47.3	47.3
85°	65.7	33.6	29.0	29.0	29.0
87.5°	24.4	12.2	12.2	10.7	10.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)