

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: P987745

Luminaire Tested: S122R3DR-B290DB2750-4F0-XX-W2A-F_2700K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P987745
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_2700K
Description: Define 2 3in Regressed Direct Recessed with 2700K BioUP LEDs {m-DER=0.473} {m-EER=0.52}
Light Source: -
Ballast/Driver: -

Summary

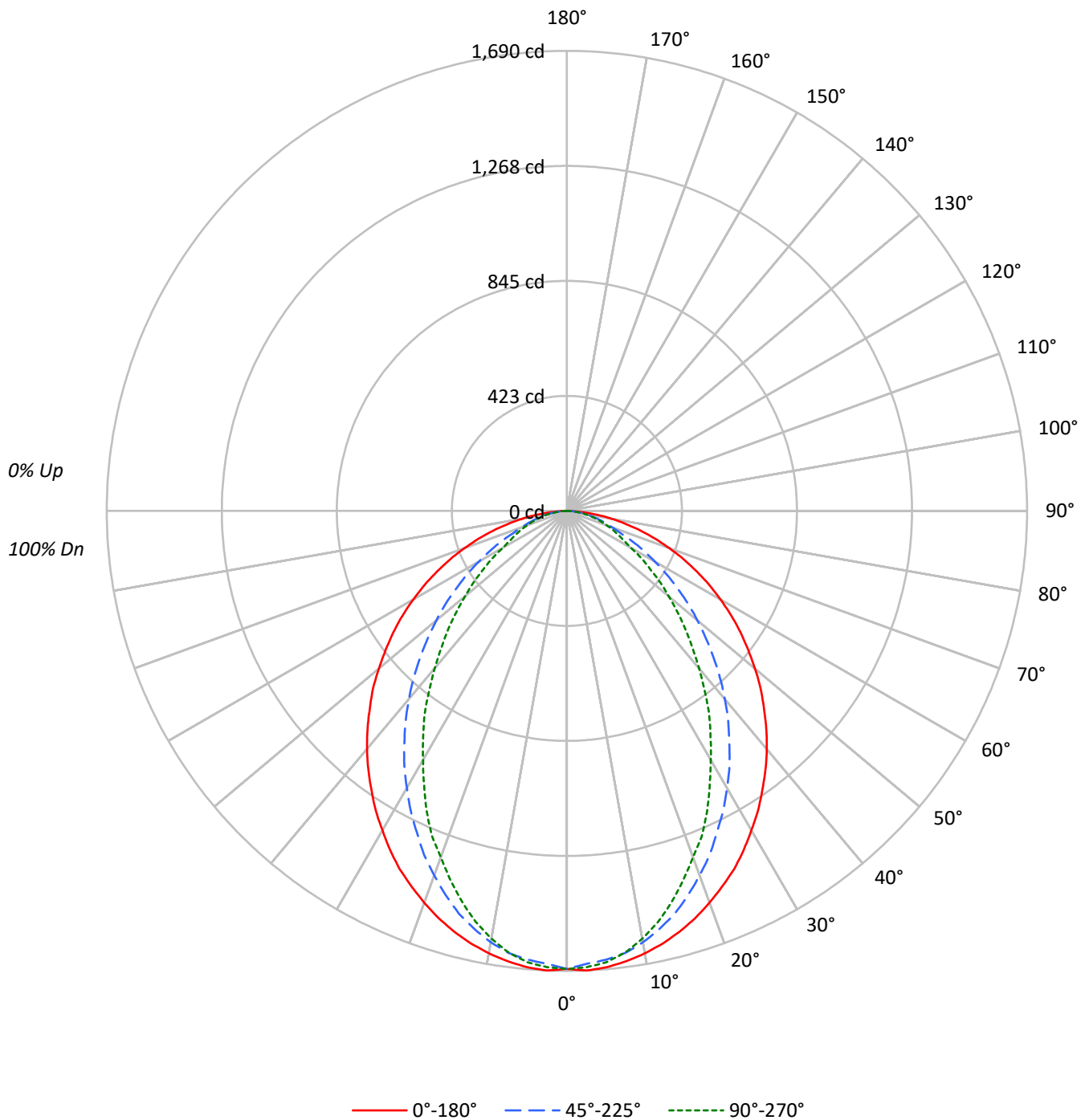
Lumens per Lamp: N/A
Luminaire Lumens: 3460.0 lumens
Efficiency: N/A
Efficacy: 56.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 0.99 / 1.16
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 61.3
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	26631	26631	26631
5°	26733	26298	26442
10°	26528	25867	25647
15°	26222	25099	24377
20°	25800	24006	22800
25°	25369	22763	21273
30°	24767	21484	19313
35°	24184	20095	17594
40°	23596	18655	15605
45°	22903	17042	13803
50°	22195	15408	12035
55°	21471	13655	10335
60°	20629	11809	8579
65°	19675	9922	7813
70°	18531	8173	7188
75°	17131	7449	6703
80°	15132	6664	6108
85°	11896	5249	5249

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 22903 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.7	4.6
10°-20°	432.8	12.5
20°-30°	607.7	17.6
30°-40°	662.4	19.1
40°-50°	608.8	17.6
50°-60°	478.1	13.8
60°-70°	311.2	9.0
70°-80°	160.2	4.6
80°-90°	40.9	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°	1198.2	34.6
0°-40°	1860.7	53.8
0°-60°	2947.6	85.2
0°-90°	3460.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3460.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1682	1675	1655	1669	1664	160
15°	1600	1583	1532	1503	1488	451
25°	1452	1404	1303	1241	1218	668
35°	1252	1174	1040	944	910	783
45°	1023	921	761	653	617	790
55°	778	659	495	404	374	695
65°	525	402	265	213	209	521
75°	280	174	122	111	110	296
85°	66	34	29	29	29	78
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1682.4	1682.4	1682.4	1682.4	1682.4
2.5°	1690.0	1682.4	1665.6	1680.8	1677.8
5°	1682.4	1674.8	1655.0	1668.7	1664.1
7.5°	1668.7	1659.5	1638.2	1644.3	1636.7
10°	1650.4	1639.7	1609.3	1604.7	1595.6
12.5°	1627.6	1613.9	1572.7	1563.6	1546.9
15°	1600.1	1583.4	1531.6	1502.7	1487.5
17.5°	1568.2	1543.8	1479.9	1446.4	1422.0
20°	1531.6	1501.2	1425.1	1387.0	1353.5
22.5°	1492.1	1457.0	1368.7	1317.0	1294.1
25°	1452.5	1403.7	1303.3	1240.8	1218.0
27.5°	1405.3	1353.5	1242.4	1170.8	1135.8
30°	1355.0	1297.2	1175.4	1097.7	1056.6
32.5°	1306.3	1236.3	1111.4	1020.1	982.0
35°	1251.5	1173.8	1039.9	944.0	910.5
37.5°	1198.2	1114.5	972.9	867.8	829.8
40°	1141.9	1050.5	902.8	794.7	755.2
42.5°	1084.0	986.6	832.8	720.1	682.1
45°	1023.1	921.1	761.3	653.2	616.6
47.5°	965.3	857.2	692.7	584.6	551.1
50°	901.3	793.2	625.7	520.7	488.7
52.5°	838.9	724.7	561.8	461.3	432.4
55°	778.0	659.2	494.8	403.5	374.5
57.5°	715.6	593.8	435.4	350.2	325.8
60°	651.6	529.8	373.0	295.4	271.0
62.5°	589.2	467.4	319.7	246.6	234.5
65°	525.3	401.9	264.9	213.2	208.6
67.5°	464.4	341.0	213.2	187.3	182.7
70°	400.4	281.7	176.6	161.4	155.3
72.5°	339.5	226.9	147.7	135.5	132.5
75°	280.1	173.6	121.8	111.1	109.6
77.5°	220.8	123.3	95.9	89.8	86.8
80°	166.0	88.3	73.1	67.0	67.0
82.5°	115.7	59.4	50.2	47.2	47.2
85°	65.5	33.5	28.9	28.9	28.9
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)