

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: P1055601

Luminaire Tested: S123R3DR-S1165D950-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055601
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1165D950-X4F0-XX-UDD-FLL-W
Description: DEFINE 3, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

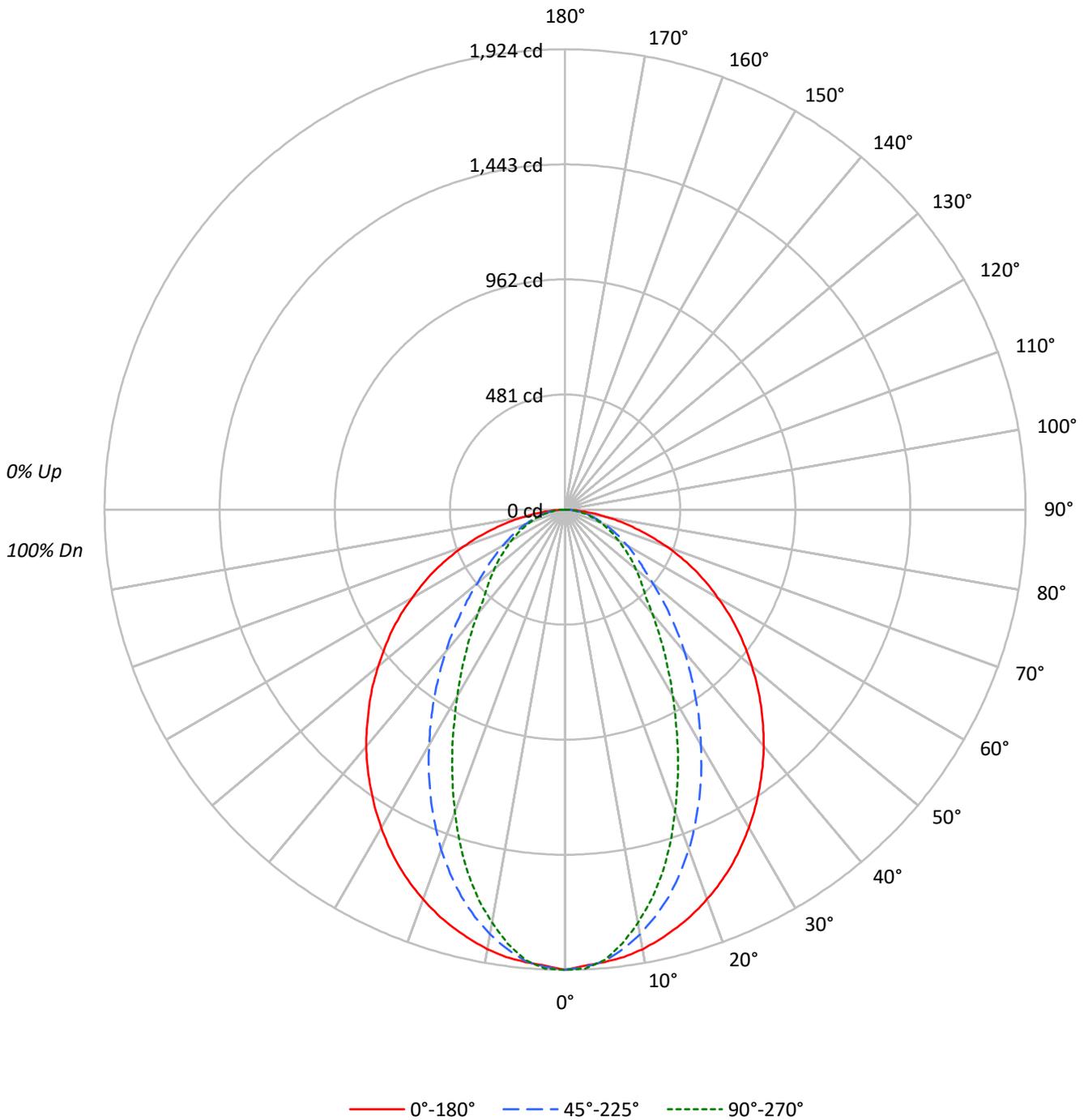
Lumens per Lamp: N/A
Luminaire Lumens: 3373.7 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.83 / 1.02
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
Input Voltage (V): 120
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	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	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	87	82	89	84	80	85	82	78	83	79	76	74				
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65				
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57				
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50				
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45				
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	47	42	40				
8	65	53	45	39	64	52	44	39	51	44	39	49	43	39	48	43	39	37				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	35	45	39	35	34				
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23192	23192	23192
5°	22985	22933	22881
10°	22846	22071	21472
15°	22573	20903	19610
20°	22244	19402	17241
25°	21858	17666	14834
30°	21372	15804	12539
35°	20859	13976	10588
40°	20334	12205	8899
45°	19724	10523	7850
50°	19107	8960	7206
55°	18539	7983	6653
60°	17764	7217	6209
65°	17034	6607	5828
70°	15873	6088	5478
75°	14208	5632	5161
80°	12185	5193	4798
85°	8563	4772	4579

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 19724 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.3	5.3
10°-20°	471.8	14.0
20°-30°	621.5	18.4
30°-40°	630.8	18.7
40°-50°	548.3	16.3
50°-60°	429.6	12.7
60°-70°	291.8	8.7
70°-80°	158.2	4.7
80°-90°	43.5	1.3
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°	1271.6	37.7
0°-40°	1902.4	56.4
0°-60°	2880.2	85.4
0°-90°	3373.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3373.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1924	1924	1924	1924	1924	
5°	1899	1922	1895	1878	1891	180
15°	1808	1783	1675	1593	1571	510
25°	1643	1544	1328	1162	1115	756
35°	1417	1249	950	768	719	886
45°	1157	928	617	476	460	893
55°	882	613	380	324	316	787
65°	597	331	232	207	204	590
75°	305	152	121	112	111	326
85°	62	37	34	32	33	78
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1923.6	1923.6	1923.6	1923.6	1923.6
2.5°	1907.8	1932.3	1913.6	1915.0	1920.8
5°	1899.2	1922.2	1894.9	1877.6	1890.6
7.5°	1886.2	1903.5	1853.1	1825.8	1830.1
10°	1866.1	1871.8	1802.8	1759.6	1753.9
12.5°	1838.8	1828.7	1742.4	1679.1	1669.0
15°	1808.5	1782.6	1674.7	1592.7	1571.1
17.5°	1774.0	1730.8	1595.6	1494.9	1461.8
20°	1733.7	1673.3	1512.2	1384.1	1343.8
22.5°	1690.6	1612.9	1421.5	1270.4	1228.7
25°	1643.1	1543.8	1328.0	1162.5	1115.1
27.5°	1591.3	1474.7	1233.0	1056.1	1002.8
30°	1535.2	1402.8	1135.2	952.5	900.7
32.5°	1477.6	1326.6	1041.7	856.1	805.7
35°	1417.2	1248.9	949.6	768.3	719.4
37.5°	1355.3	1169.7	860.4	684.9	638.8
40°	1292.0	1089.2	775.5	607.2	565.4
42.5°	1224.4	1008.6	693.5	533.8	502.1
45°	1156.8	928.0	617.2	476.2	460.4
47.5°	1089.2	846.0	545.3	435.9	421.6
50°	1018.7	766.9	477.7	398.5	384.2
52.5°	949.6	689.2	421.6	362.6	352.5
55°	882.0	612.9	379.8	323.7	316.5
57.5°	811.5	538.1	338.1	293.5	284.9
60°	736.7	466.2	299.3	261.9	257.5
62.5°	669.0	398.5	264.7	234.5	230.2
65°	597.1	330.9	231.6	207.2	204.3
67.5°	523.7	274.8	201.4	181.3	179.8
70°	450.3	231.6	172.7	156.8	155.4
72.5°	378.4	191.4	145.3	135.2	132.4
75°	305.0	152.5	120.9	112.2	110.8
77.5°	238.8	118.0	96.4	90.6	89.2
80°	175.5	87.8	74.8	70.5	69.1
82.5°	115.1	60.4	53.2	50.4	50.4
85°	61.9	37.4	34.5	31.7	33.1
87.5°	21.6	15.8	15.8	14.4	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)