

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: P1055166

Luminaire Tested: S122R3DR-S1005D940-X4F0-XX-UDD-FLL-W

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055166
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-1)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S122R3DR-S1005D940-X4F0-XX-UDD-FLL-W
Description: DEFINE 2, WHITE 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

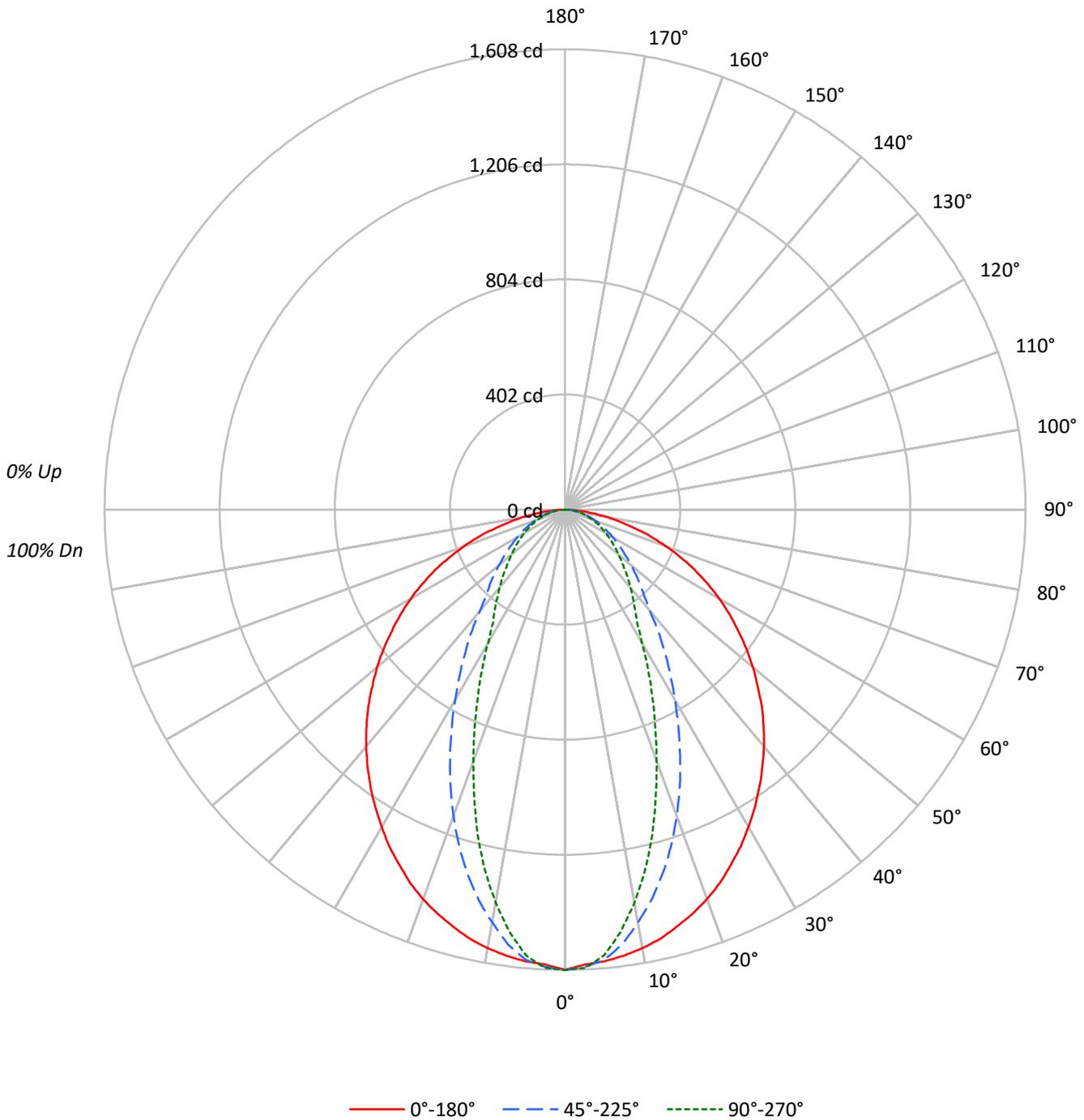
Lumens per Lamp: N/A
Luminaire Lumens: 2432.9 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.71 / 0.9
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	78	72	92	83	77	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	71	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	60	55	64	59	54	63	58	54	52				
6	75	63	55	50	74	63	55	49	61	54	49	59	53	49	58	52	48	46				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44	42				
8	66	54	46	41	65	53	46	41	52	45	40	51	45	40	50	44	40	38				
9	62	50	43	37	61	49	42	37	48	42	37	47	41	37	46	41	37	35				
10	59	47	39	35	58	46	39	34	45	39	34	44	38	34	43	38	34	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	30473	30473	30473
5°	30129	30026	29744
10°	29935	28174	26829
15°	29596	25824	23080
20°	29202	22966	18845
25°	28618	19849	15041
30°	28009	16771	11739
35°	27373	14028	9860
40°	26708	11374	8780
45°	26016	9946	7856
50°	25251	8801	7174
55°	24387	7951	6662
60°	23542	7237	6218
65°	22428	6630	5846
70°	20784	6182	5512
75°	18410	5615	5219
80°	15700	5281	4844
85°	10825	4674	4391

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 26016 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.4	6.1
10°-20°	372.1	15.3
20°-30°	458.6	18.8
30°-40°	439.9	18.1
40°-50°	379.5	15.6
50°-60°	294.4	12.1
60°-70°	201.6	8.3
70°-80°	109.5	4.5
80°-90°	30.0	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°	978.1	40.2
0°-40°	1418.0	58.3
0°-60°	2091.8	86.0
0°-90°	2432.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2432.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1608	1608	1608	1608	1608	
5°	1584	1607	1579	1559	1564	150
15°	1509	1463	1317	1209	1177	426
25°	1369	1222	950	775	720	631
35°	1184	939	606	452	426	740
45°	971	654	371	307	293	748
55°	738	393	241	208	202	661
65°	500	214	148	134	130	494
75°	252	98	77	73	71	269
85°	50	24	22	22	20	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1608.4	1608.4	1608.4	1608.4	1608.4
2.5°	1590.9	1617.8	1599.0	1599.0	1603.0
5°	1584.2	1607.1	1578.8	1558.7	1564.0
7.5°	1572.1	1588.3	1531.8	1488.7	1487.4
10°	1556.0	1557.3	1464.5	1408.0	1394.6
12.5°	1535.8	1514.3	1395.9	1311.2	1291.0
15°	1508.9	1463.2	1316.6	1209.0	1176.7
17.5°	1480.7	1410.7	1231.9	1097.4	1053.0
20°	1448.4	1347.5	1139.1	985.8	934.7
22.5°	1412.1	1287.0	1046.3	878.2	824.4
25°	1369.0	1222.5	949.5	774.6	719.5
27.5°	1327.4	1156.6	856.7	683.2	626.7
30°	1280.3	1085.3	766.6	595.8	536.6
32.5°	1233.2	1012.7	683.2	512.4	468.0
35°	1183.5	938.7	606.5	451.9	426.3
37.5°	1132.4	866.1	533.9	411.5	388.7
40°	1079.9	793.5	459.9	372.5	355.0
42.5°	1026.1	722.2	408.8	340.2	324.1
45°	971.0	653.6	371.2	306.6	293.2
47.5°	911.8	585.0	334.9	278.4	266.3
50°	856.7	519.1	298.6	252.8	243.4
52.5°	797.5	454.6	269.0	230.0	221.9
55°	738.3	392.7	240.7	208.4	201.7
57.5°	680.5	333.5	213.8	188.3	182.9
60°	621.3	286.5	191.0	169.4	164.1
62.5°	560.8	248.8	169.4	152.0	146.6
65°	500.3	213.8	147.9	134.5	130.4
67.5°	437.1	180.2	129.1	118.3	115.7
70°	375.2	150.6	111.6	102.2	99.5
72.5°	314.7	122.4	94.1	87.4	84.7
75°	251.5	98.2	76.7	72.6	71.3
77.5°	196.3	76.7	61.9	59.2	57.8
80°	143.9	56.5	48.4	45.7	44.4
82.5°	95.5	39.0	35.0	33.6	32.3
85°	49.8	24.2	21.5	21.5	20.2
87.5°	16.1	10.8	10.8	10.8	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)