

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: P1055164

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

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055164
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-2)
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-B
Description: DEFINE 2, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

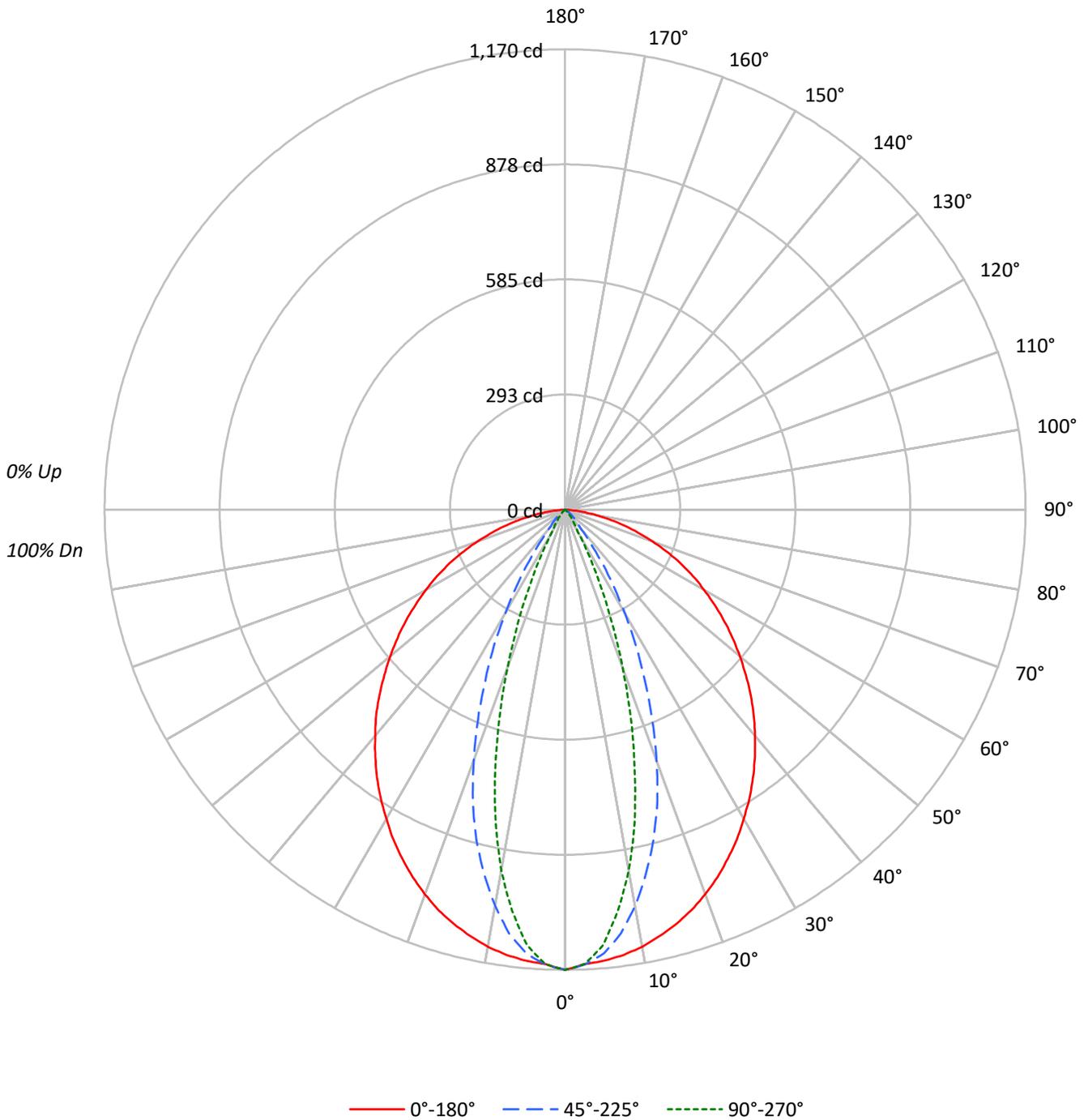
Lumens per Lamp: N/A
Luminaire Lumens: 1064.4 lumens
Efficiency: N/A
Efficacy: 25.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 0.56 / 0.7
Luminous Opening: Rectangular (W 0.15' x L: 3.9' x H: 0')
CIE Type: Direct

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										
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	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100														
1	112	109	106	103	110	106	104	101	102	100	98	99	97	95	95	94	92	91						91														
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	81						81														
3	98	91	85	80	96	89	84	79	86	82	78	84	80	77	82	78	75	74						74														
4	92	83	77	72	90	82	76	71	80	75	70	78	73	70	76	72	69	67						67														
5	87	77	70	65	85	76	70	65	74	69	64	72	68	64	71	66	63	61						61														
6	82	72	65	60	80	71	64	59	69	63	59	68	63	59	66	62	58	56						56														
7	77	67	60	55	76	66	59	55	65	59	55	63	58	54	62	57	54	52						52														
8	73	62	56	51	72	62	55	51	61	55	51	60	54	50	59	54	50	49						49														
9	70	59	52	48	68	58	52	47	57	51	47	56	51	47	55	50	47	45						45														
10	66	55	49	45	65	55	49	44	54	48	44	53	48	44	52	48	44	43						43														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22167	22167	22167
5°	21894	21536	21125
10°	21706	19688	17930
15°	21393	17041	13426
20°	20986	13692	8595
25°	20465	10036	4413
30°	19860	6561	1442
35°	19255	3638	840
40°	18559	1464	465
45°	17871	973	180
50°	17083	554	80
55°	16304	268	43
60°	15441	102	0
65°	14529	58	0
70°	13034	72	0
75°	11222	95	0
80°	8510	0	0
85°	3500	283	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 17871 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.9	9.9
10°-20°	243.7	22.9
20°-30°	247.4	23.2
30°-40°	185.7	17.4
40°-50°	130.0	12.2
50°-60°	79.6	7.5
60°-70°	47.4	4.5
70°-80°	21.8	2.1
80°-90°	3.9	0.4
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°	596.0	56.0
0°-40°	781.7	73.4
0°-60°	991.3	93.1
0°-90°	1064.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1064.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1170	1170	1170	1170	1170	
5°	1151	1162	1132	1111	1111	109
15°	1091	1032	869	736	684	307
25°	979	807	480	274	211	451
35°	832	542	157	47	36	520
45°	667	286	36	11	7	514
55°	494	87	8	3	1	441
65°	324	26	1	1	0	319
75°	153	3	1	1	0	163
85°	16	0	1	1	0	27
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1170.0	1170.0	1170.0	1170.0	1170.0
2.5°	1156.6	1174.0	1157.9	1155.2	1156.6
5°	1151.2	1161.9	1132.4	1110.8	1110.8
7.5°	1141.8	1141.8	1086.6	1042.3	1028.8
10°	1128.3	1113.5	1023.4	952.1	932.0
12.5°	1110.8	1075.9	949.5	848.6	816.3
15°	1090.7	1031.5	868.8	735.6	684.5
17.5°	1067.8	981.7	778.7	613.2	554.1
20°	1040.9	927.9	679.1	488.2	426.3
22.5°	1011.3	868.8	578.3	376.6	310.7
25°	979.0	806.9	480.1	274.3	211.1
27.5°	945.4	742.4	390.0	188.3	129.1
30°	907.8	675.1	299.9	111.6	65.9
32.5°	871.5	610.6	224.6	60.5	48.4
35°	832.5	542.0	157.3	47.1	36.3
37.5°	792.1	477.4	96.8	35.0	26.9
40°	750.4	411.5	59.2	25.6	18.8
42.5°	710.1	349.7	47.1	17.5	12.1
45°	667.0	286.5	36.3	10.8	6.7
47.5°	622.7	228.6	26.9	6.7	4.0
50°	579.6	177.5	18.8	4.0	2.7
52.5°	536.6	130.4	12.1	2.7	1.3
55°	493.6	87.4	8.1	2.7	1.3
57.5°	450.5	61.9	5.4	1.3	1.3
60°	407.5	48.4	2.7	1.3	0.0
62.5°	367.1	37.7	2.7	1.3	1.3
65°	324.1	25.6	1.3	1.3	0.0
67.5°	278.4	16.1	1.3	1.3	0.0
70°	235.3	9.4	1.3	1.3	0.0
72.5°	193.7	5.4	1.3	1.3	0.0
75°	153.3	2.7	1.3	1.3	0.0
77.5°	114.3	1.3	0.0	1.3	0.0
80°	78.0	0.0	0.0	1.3	0.0
82.5°	45.7	0.0	0.0	1.3	0.0
85°	16.1	0.0	1.3	1.3	0.0
87.5°	0.0	0.0	1.3	1.3	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)