

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: P1055570

Luminaire Tested: S123R3DR-S1000D940-X4F0-XX-UDD-FLL-S

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2019
Report Number: P1055570
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-6)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123R3DR-S1000D940-X4F0-XX-UDD-FLL-S
Description: DEFINE 3, SILVER 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

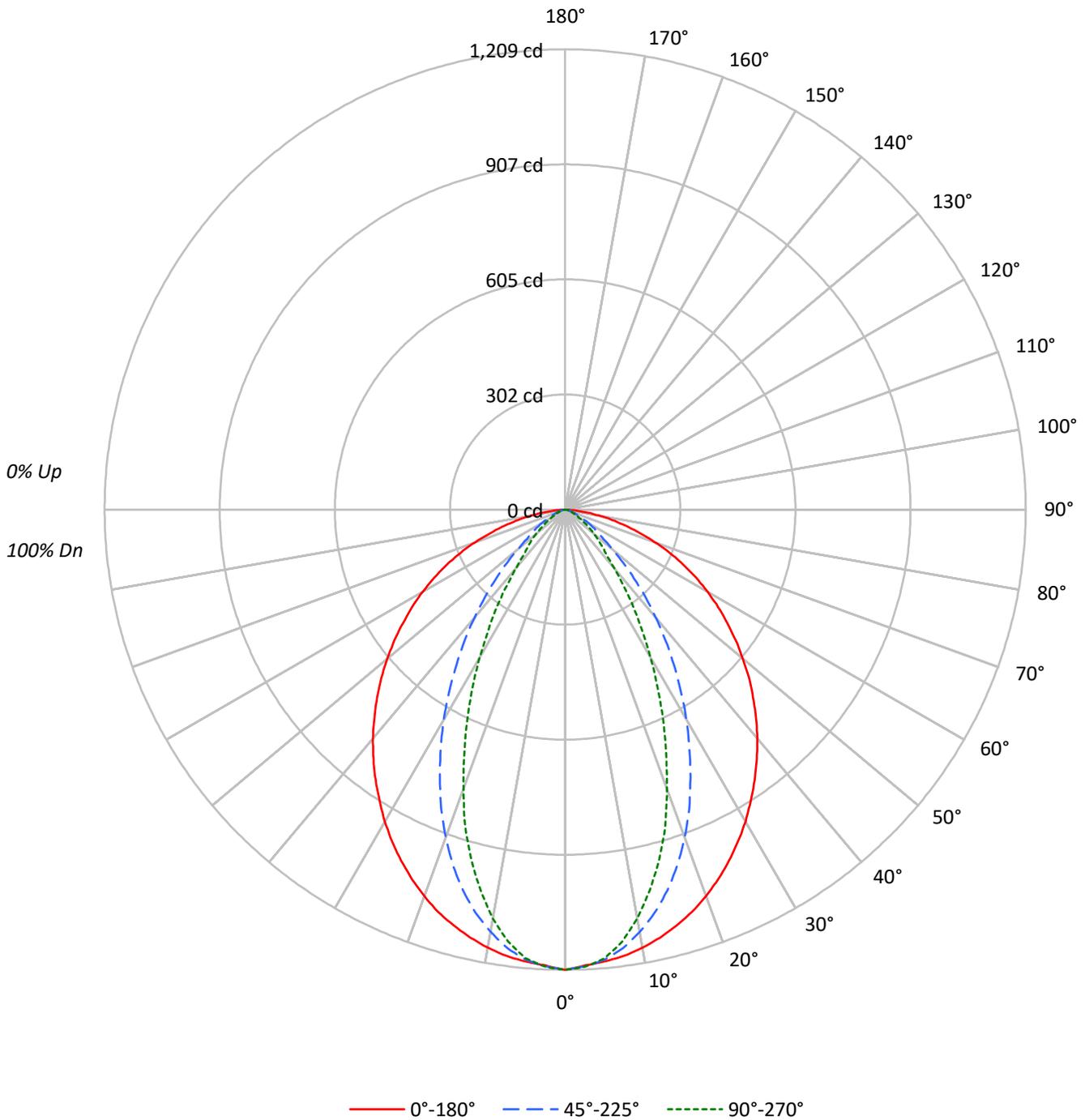
Lumens per Lamp: N/A
Luminaire Lumens: 1681.2 lumens
Efficiency: N/A
Efficacy: 48.5 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 0.77 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 34.7
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									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	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	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89																												
2	104	97	92	87	101	95	90	86	92	88	84	89	85	82	86	83	81	79																												
3	96	88	81	76	94	86	80	76	84	78	74	81	77	73	79	75	72	70																												
4	90	80	73	67	88	79	72	67	76	71	66	74	69	65	72	68	64	62																												
5	84	73	66	60	82	72	65	60	70	64	59	68	63	59	67	62	58	56																												
6	78	67	60	54	77	66	59	54	65	58	53	63	57	53	62	57	53	51																												
7	73	62	54	49	72	61	54	49	60	53	49	58	53	48	57	52	48	46																												
8	69	57	50	45	68	57	50	45	56	49	45	54	49	44	53	48	44	42																												
9	65	53	46	41	64	53	46	41	52	45	41	51	45	41	50	45	41	39																												
10	62	50	43	38	60	49	43	38	48	42	38	48	42	38	47	42	38	36																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14575	14575	14575
5°	14423	14368	14326
10°	14309	13790	13355
15°	14117	12930	11885
20°	13864	11761	10013
25°	13537	10351	8079
30°	13177	8869	6222
35°	12767	7319	4604
40°	12353	5825	3138
45°	11899	4356	2365
50°	11413	3031	1848
55°	10911	2215	1349
60°	10390	1659	967
65°	9774	1113	753
70°	8848	807	606
75°	7635	587	480
80°	6124	479	396
85°	3168	470	318

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 11899 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	6.6
10°-20°	290.9	17.3
20°-30°	365.5	21.7
30°-40°	340.4	20.2
40°-50°	260.6	15.5
50°-60°	173.2	10.3
60°-70°	93.4	5.6
70°-80°	38.3	2.3
80°-90°	7.3	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°	768.1	45.7
0°-40°	1108.5	65.9
0°-60°	1542.3	91.7
0°-90°	1681.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1681.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1192	1204	1187	1183	1184	113
15°	1131	1113	1036	975	952	319
25°	1018	949	778	649	607	469
35°	867	739	497	352	313	542
45°	698	516	256	150	139	538
55°	519	300	105	73	64	465
65°	343	116	39	29	26	339
75°	164	28	13	12	10	175
85°	23	3	3	3	2	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.9	1208.9	1208.9	1208.9	1208.9
2.5°	1198.6	1213.5	1200.9	1202.1	1202.1
5°	1191.7	1204.3	1187.2	1182.6	1183.7
7.5°	1182.6	1190.6	1161.9	1147.0	1144.8
10°	1168.8	1171.1	1126.4	1100.1	1090.9
12.5°	1151.6	1143.6	1085.2	1041.6	1024.4
15°	1131.0	1112.7	1035.9	975.2	952.2
17.5°	1108.1	1077.1	979.7	900.7	873.2
20°	1080.6	1037.0	916.7	818.2	780.4
22.5°	1050.8	994.6	850.3	733.4	691.0
25°	1017.6	948.8	778.1	648.6	607.3
27.5°	983.2	899.5	707.0	568.4	526.0
30°	946.5	849.1	637.1	490.4	446.9
32.5°	906.4	794.1	564.9	418.3	374.7
35°	867.4	739.1	497.3	351.8	312.8
37.5°	826.2	684.1	432.0	293.4	249.8
40°	784.9	628.0	370.1	236.1	199.4
42.5°	741.4	571.8	311.7	187.9	159.3
45°	697.9	515.7	255.5	150.1	138.7
47.5°	654.3	459.5	206.3	129.5	118.0
50°	608.5	405.6	161.6	110.0	98.5
52.5°	564.9	351.8	126.0	90.5	80.2
55°	519.1	300.2	105.4	73.3	64.2
57.5°	476.7	247.5	87.1	57.3	50.4
60°	430.9	200.5	68.8	44.7	40.1
62.5°	387.3	157.0	52.7	35.5	32.1
65°	342.6	115.7	39.0	28.6	26.4
67.5°	297.9	83.7	29.8	22.9	21.8
70°	251.0	63.0	22.9	18.3	17.2
72.5°	206.3	44.7	17.2	14.9	13.8
75°	163.9	27.5	12.6	11.5	10.3
77.5°	126.0	16.0	9.2	9.2	8.0
80°	88.2	9.2	6.9	6.9	5.7
82.5°	53.9	5.7	4.6	4.6	4.6
85°	22.9	3.4	3.4	3.4	2.3
87.5°	3.4	1.1	1.1	1.1	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)