

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: P1059399

Luminaire Tested: S123RDR-S775D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

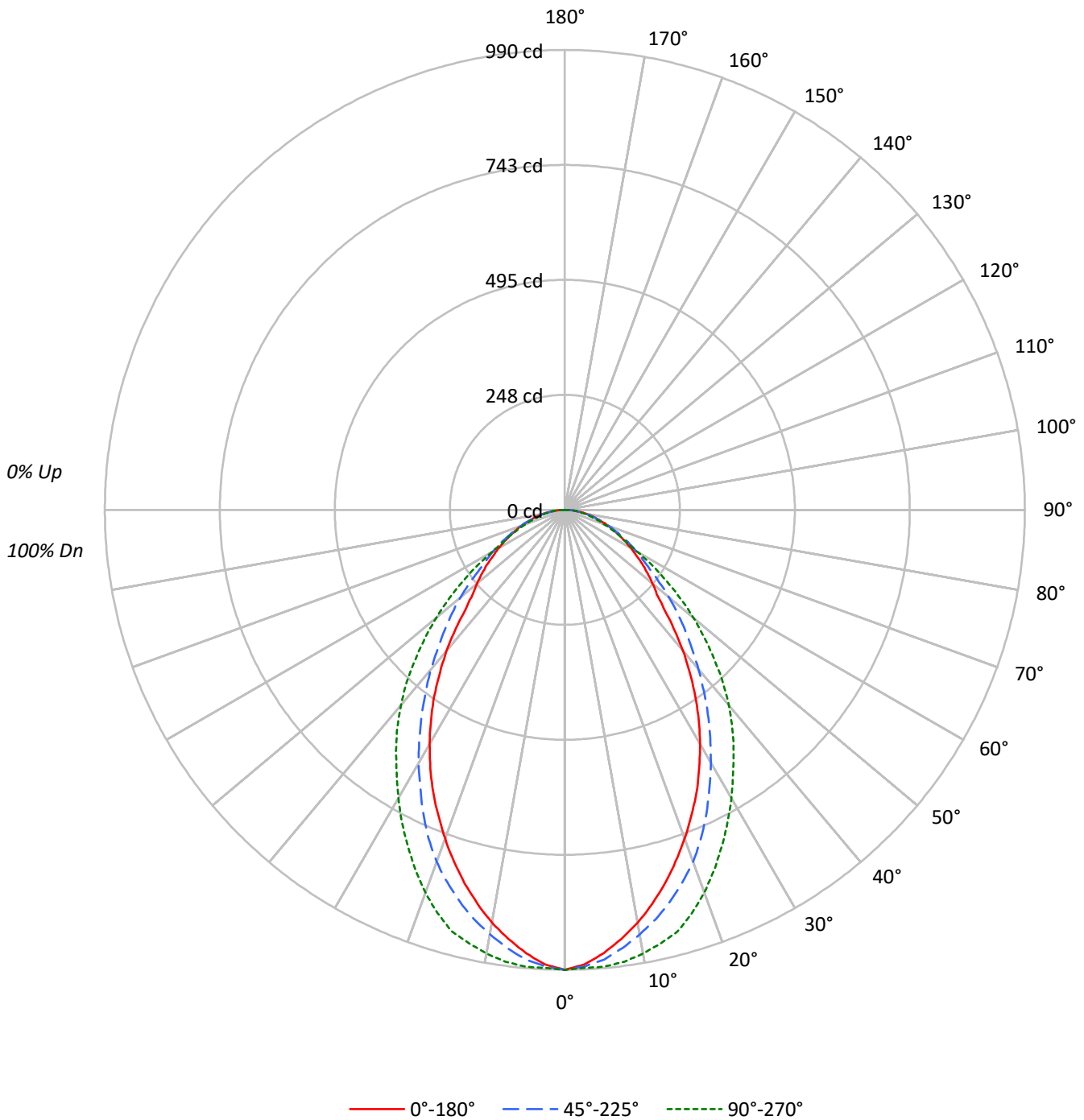
Lumens per Lamp: N/A
Luminaire Lumens: 1740.1 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 25.8
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	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	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11629	11629	11629
5°	11291	11451	11633
10°	10761	11066	11563
15°	10122	10619	11416
20°	9415	10074	10958
25°	8690	9342	10357
30°	7893	8527	9718
35°	7024	7696	9077
40°	6061	6858	8412
45°	5010	6071	7543
50°	4499	5356	6586
55°	4170	4571	5460
60°	3842	4164	4183
65°	3576	3765	3504
70°	3365	3423	3073
75°	3171	3053	2709
80°	2996	2766	2536
85°	2870	3099	2870

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7543 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.7	5.3
10°-20°	247.1	14.2
20°-30°	334.3	19.2
30°-40°	343.5	19.7
40°-50°	288.5	16.6
50°-60°	206.8	11.9
60°-70°	131.7	7.6
70°-80°	72.3	4.2
80°-90°	24.1	1.4
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°	673.1	38.7
0°-40°	1016.6	58.4
0°-60°	1511.9	86.9
0°-90°	1740.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1740.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	990	990	990	990	990	
5°	958	975	972	978	987	90
15°	833	856	874	911	939	233
25°	671	696	721	760	799	307
35°	490	516	537	585	633	305
45°	302	328	366	418	454	238
55°	204	208	223	253	267	182
65°	129	136	136	128	126	128
75°	70	77	67	62	60	74
85°	21	22	23	24	21	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	990.3	990.3	990.3	990.3	990.3
2.5°	979.2	992.8	983.5	984.3	986.9
5°	957.9	974.9	971.5	978.3	986.9
7.5°	931.5	950.2	951.1	967.3	980.9
10°	902.5	922.1	928.1	952.8	969.8
12.5°	868.4	889.7	902.5	933.2	955.3
15°	832.6	855.6	873.5	911.0	939.1
17.5°	793.4	818.1	841.1	881.2	910.2
20°	753.4	779.8	806.2	843.7	876.9
22.5°	711.6	738.9	766.1	802.8	839.4
25°	670.7	696.3	721.0	760.2	799.4
27.5°	626.4	652.8	674.1	717.6	758.5
30°	582.1	608.5	628.9	674.1	716.7
32.5°	536.0	563.3	582.1	628.9	673.3
35°	490.0	516.4	536.9	584.6	633.2
37.5°	441.4	470.4	490.9	544.6	592.3
40°	395.4	422.7	447.4	503.7	548.8
42.5°	347.7	375.8	404.0	461.9	503.7
45°	301.7	328.1	365.6	418.4	454.2
47.5°	268.4	285.5	329.0	373.3	407.4
50°	246.3	253.1	293.2	332.4	360.5
52.5°	224.1	229.2	256.5	292.3	313.6
55°	203.7	207.9	223.3	253.1	266.7
57.5°	181.5	185.8	198.6	215.6	223.3
60°	163.6	167.0	177.3	179.8	178.1
62.5°	145.7	150.8	156.0	150.0	147.4
65°	128.7	136.4	135.5	127.8	126.1
67.5°	113.3	121.0	116.8	109.1	106.5
70°	98.0	105.7	99.7	92.0	89.5
72.5°	83.5	92.0	82.7	75.8	74.1
75°	69.9	76.7	67.3	62.2	59.7
77.5°	57.1	62.2	53.7	49.4	47.7
80°	44.3	47.7	40.9	38.3	37.5
82.5°	32.4	34.1	29.8	31.5	30.7
85°	21.3	22.2	23.0	23.9	21.3
87.5°	10.2	14.5	14.5	13.6	11.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)