

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: P1059398

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-67)
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-S
Description: DEFINE 3 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

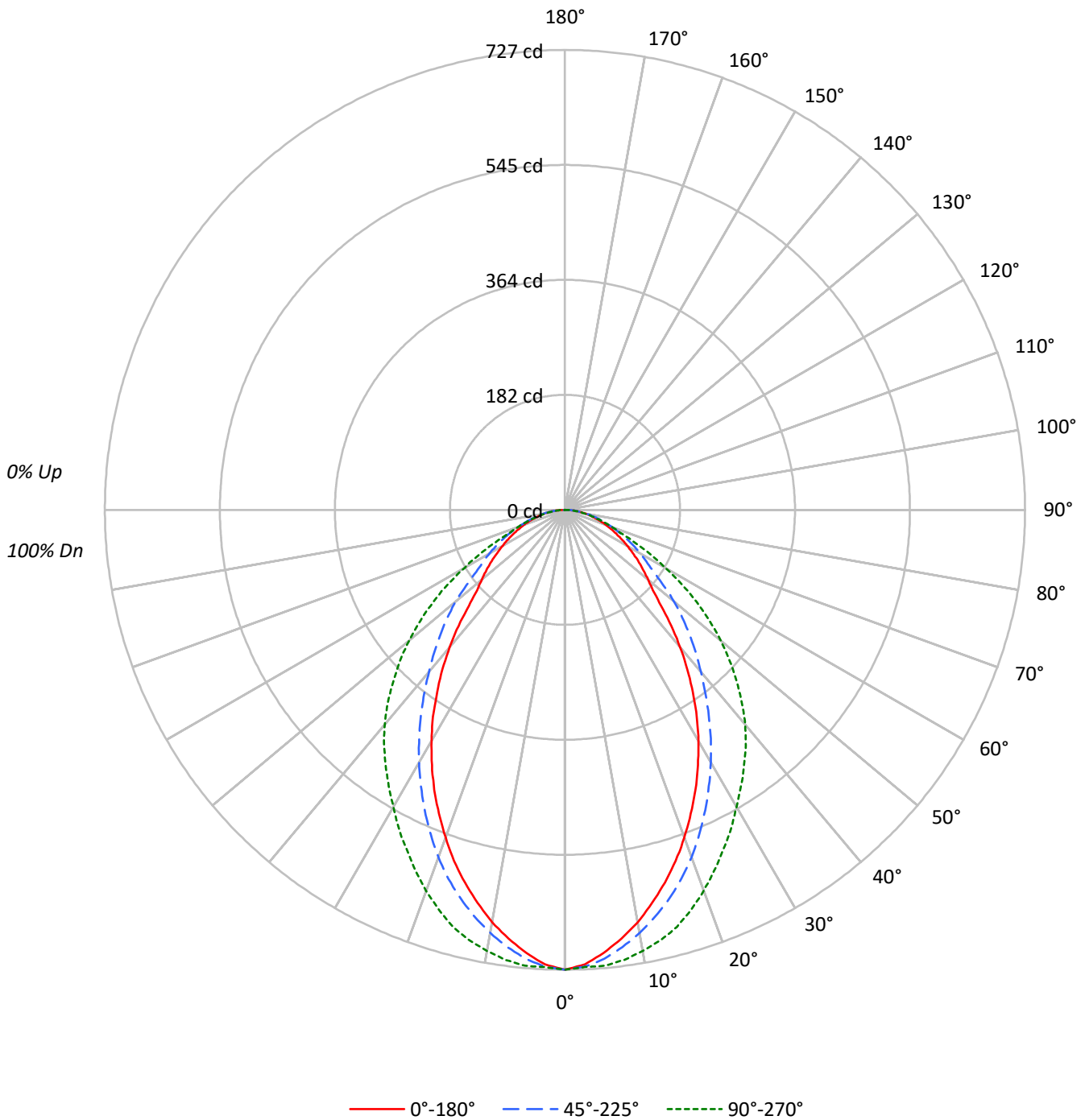
Lumens per Lamp: N/A
Luminaire Lumens: 1313.0 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	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	100	97	100	97	94	96	93	91	92	90	89	87																																				
2	102	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75																																				
3	94	84	77	71	91	83	76	71	80	74	69	77	72	68	75	71	67	65																																				
4	87	76	68	62	84	74	67	61	72	66	61	70	64	60	68	63	59	57																																				
5	80	69	60	54	78	68	60	54	66	59	54	64	58	53	62	57	53	51																																				
6	75	63	54	48	73	62	54	48	60	53	48	58	52	47	57	51	47	45																																				
7	70	57	49	44	68	56	49	43	55	48	43	54	47	43	52	47	43	41																																				
8	65	53	45	39	64	52	45	39	51	44	39	50	43	39	48	43	39	37																																				
9	61	49	41	36	60	48	41	36	47	40	36	46	40	36	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°	8536	8536	8536
5°	8286	8397	8528
10°	7895	8098	8443
15°	7417	7739	8298
20°	6889	7305	8007
25°	6327	6790	7673
30°	5719	6251	7349
35°	5044	5681	7073
40°	4336	5120	6792
45°	3565	4613	6369
50°	3129	4110	5870
55°	2897	3507	5198
60°	2661	3222	4302
65°	2487	2959	3387
70°	2341	2692	2692
75°	2205	2473	2318
80°	2076	2245	1961
85°	1954	2183	1495

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6369 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.2	5.1
10°-20°	180.2	13.7
20°-30°	244.3	18.6
30°-40°	255.4	19.5
40°-50°	221.5	16.9
50°-60°	164.8	12.6
60°-70°	105.7	8.1
70°-80°	56.7	4.3
80°-90°	17.1	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°	491.7	37.4
0°-40°	747.1	56.9
0°-60°	1133.4	86.3
0°-90°	1313.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1313.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	727	727	727	727	727	
5°	703	715	712	718	724	66
15°	610	625	637	662	683	171
25°	488	504	524	559	592	224
35°	352	369	396	446	493	220
45°	215	231	278	338	384	169
55°	142	145	171	220	254	127
65°	90	97	106	113	122	89
75°	49	56	54	52	51	51
85°	14	18	16	14	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	726.9	726.9	726.9	726.9	726.9
2.5°	719.2	729.4	722.6	722.6	723.5
5°	703.0	715.0	712.4	717.5	723.5
7.5°	683.4	696.2	697.1	709.0	717.5
10°	662.1	674.9	679.2	696.2	708.1
12.5°	636.6	651.0	658.7	680.0	697.1
15°	610.1	624.6	636.6	662.1	682.6
17.5°	582.0	596.5	611.8	640.8	663.0
20°	551.3	566.7	584.6	613.6	640.8
22.5°	519.8	536.0	554.8	586.3	617.0
25°	488.3	503.6	524.1	559.0	592.2
27.5°	455.1	471.2	492.5	530.9	568.4
30°	421.8	438.0	461.0	501.9	542.0
32.5°	387.7	403.9	428.6	474.7	518.1
35°	351.9	369.0	396.3	446.5	493.4
37.5°	317.9	334.0	364.7	420.1	469.5
40°	282.9	300.0	334.0	393.7	443.1
42.5°	248.8	265.9	305.9	365.6	414.1
45°	214.7	230.9	277.8	337.5	383.5
47.5°	188.3	200.3	251.4	307.6	353.6
50°	171.3	175.5	225.0	278.7	321.3
52.5°	155.9	159.4	196.0	249.7	288.0
55°	141.5	144.9	171.3	219.9	253.9
57.5°	127.0	131.2	152.5	189.2	219.9
60°	113.3	118.4	137.2	161.9	183.2
62.5°	101.4	107.4	121.9	137.2	151.7
65°	89.5	97.1	106.5	113.3	121.9
67.5°	78.4	86.9	92.0	93.7	94.6
70°	68.2	76.7	78.4	78.4	78.4
72.5°	57.9	67.3	65.6	64.8	63.9
75°	48.6	56.2	54.5	52.0	51.1
77.5°	39.2	46.0	43.5	41.8	39.2
80°	30.7	35.8	33.2	31.5	29.0
82.5°	23.0	26.4	23.9	22.2	19.6
85°	14.5	17.9	16.2	13.6	11.1
87.5°	7.7	10.2	8.5	7.7	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)