

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: P1059408

Luminaire Tested: S123RDR-S775D950-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059408
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-S775D950-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: 5000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

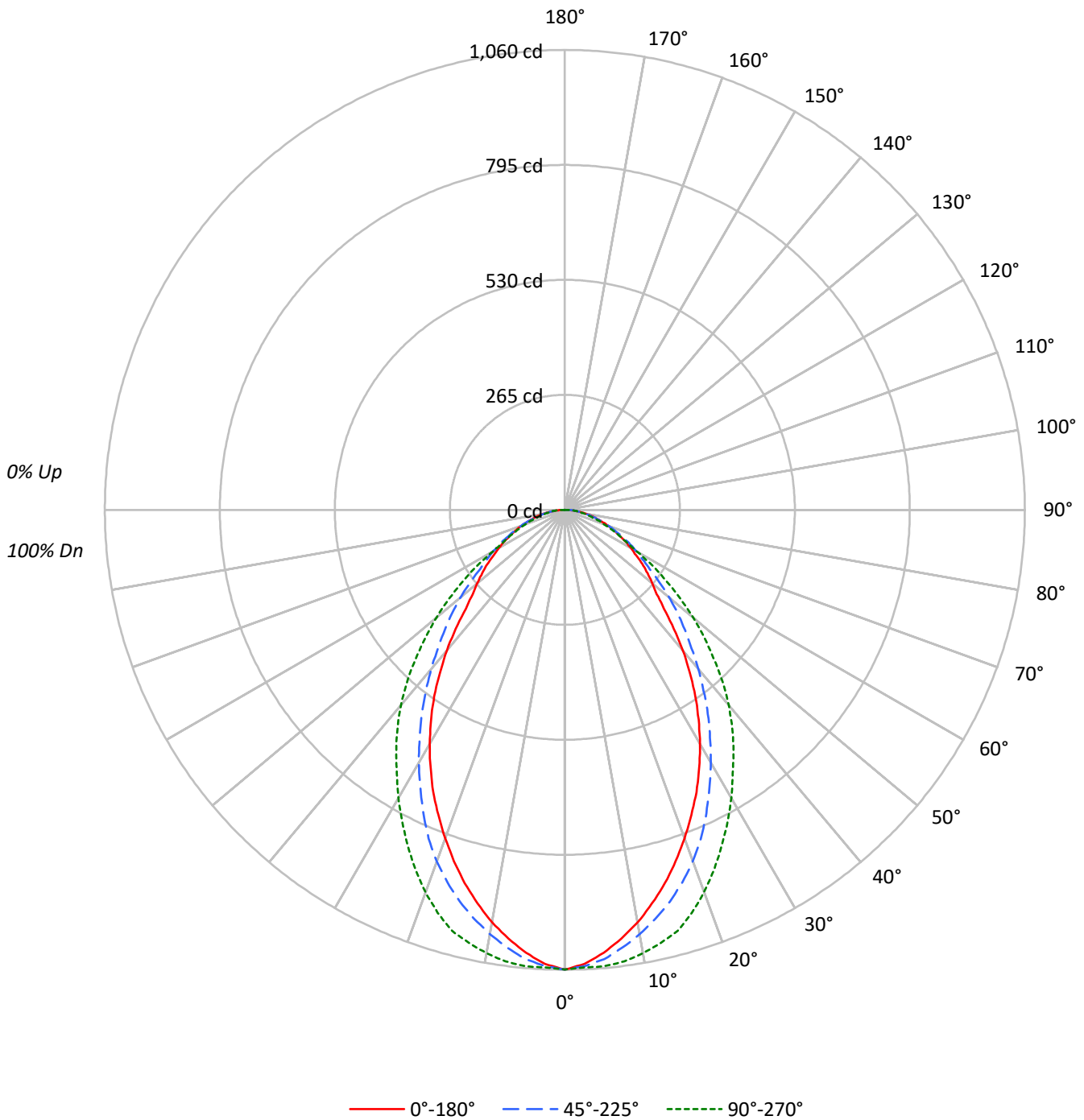
Lumens per Lamp: N/A
Luminaire Lumens: 1861.7 lumens
Efficiency: N/A
Efficacy: 72.2 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1059408

CATALOG NUMBER: S123RDR-S775D950-X4F0-XX-UDD-WVL-W

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
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°	12441	12441	12441
5°	12080	12252	12445
10°	11512	11839	12372
15°	10829	11360	12214
20°	10072	10778	11724
25°	9296	9993	11080
30°	8443	9124	10397
35°	7516	8234	9710
40°	6486	7338	9001
45°	5361	6495	8071
50°	4814	5729	7046
55°	4461	4891	5843
60°	4112	4453	4476
65°	3826	4029	3748
70°	3601	3663	3286
75°	3394	3267	2895
80°	3205	2962	2712
85°	3072	3314	3072

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 8071 cd/sqm

TEST NUMBER: P1059408

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	5.3
10°-20°	264.4	14.2
20°-30°	357.6	19.2
30°-40°	367.5	19.7
40°-50°	308.6	16.6
50°-60°	221.3	11.9
60°-70°	140.9	7.6
70°-80°	77.4	4.2
80°-90°	25.8	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°	720.1	38.7
0°-40°	1087.6	58.4
0°-60°	1617.6	86.9
0°-90°	1861.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1861.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1025	1043	1039	1047	1056	96
15°	891	915	934	975	1005	250
25°	718	745	771	813	855	329
35°	524	552	574	626	677	326
45°	323	351	391	448	486	255
55°	218	222	239	271	285	195
65°	138	146	145	137	135	137
75°	75	82	72	67	64	80
85°	23	24	25	26	23	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1059.5	1059.5	1059.5	1059.5	1059.5
2.5°	1047.6	1062.2	1052.2	1053.1	1055.8
5°	1024.8	1043.0	1039.4	1046.7	1055.8
7.5°	996.5	1016.6	1017.5	1034.8	1049.4
10°	965.5	986.5	992.9	1019.3	1037.6
12.5°	929.1	951.9	965.5	998.4	1022.1
15°	890.8	915.4	934.5	974.7	1004.7
17.5°	848.8	875.3	899.9	942.8	973.7
20°	806.0	834.3	862.5	902.6	938.2
22.5°	761.3	790.5	819.7	858.9	898.1
25°	717.5	744.9	771.3	813.3	855.2
27.5°	670.1	698.4	721.2	767.7	811.5
30°	622.7	651.0	672.9	721.2	766.8
32.5°	573.5	602.7	622.7	672.9	720.3
35°	524.3	552.5	574.4	625.5	677.4
37.5°	472.3	503.3	525.2	582.6	633.7
40°	423.1	452.2	478.7	538.8	587.2
42.5°	372.0	402.1	432.2	494.2	538.8
45°	322.8	351.0	391.1	447.7	486.0
47.5°	287.2	305.4	351.9	399.3	435.8
50°	263.5	270.8	313.6	355.6	385.7
52.5°	239.8	245.3	274.4	312.7	335.5
55°	217.9	222.5	238.9	270.8	285.4
57.5°	194.2	198.8	212.4	230.7	238.9
60°	175.1	178.7	189.6	192.4	190.6
62.5°	155.9	161.4	166.9	160.5	157.7
65°	137.7	145.9	145.0	136.8	134.9
67.5°	121.3	129.5	124.9	116.7	114.0
70°	104.9	113.1	106.7	98.5	95.7
72.5°	89.4	98.5	88.4	81.1	79.3
75°	74.8	82.1	72.0	66.6	63.8
77.5°	61.1	66.6	57.4	52.9	51.1
80°	47.4	51.1	43.8	41.0	40.1
82.5°	34.6	36.5	31.9	33.7	32.8
85°	22.8	23.7	24.6	25.5	22.8
87.5°	10.9	15.5	15.5	14.6	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)