

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: P1059364

Luminaire Tested: S123RDR-S775D927-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-30)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S775D927-X4F0-XX-UDD-BVL-B
Description: DEFINE 3 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

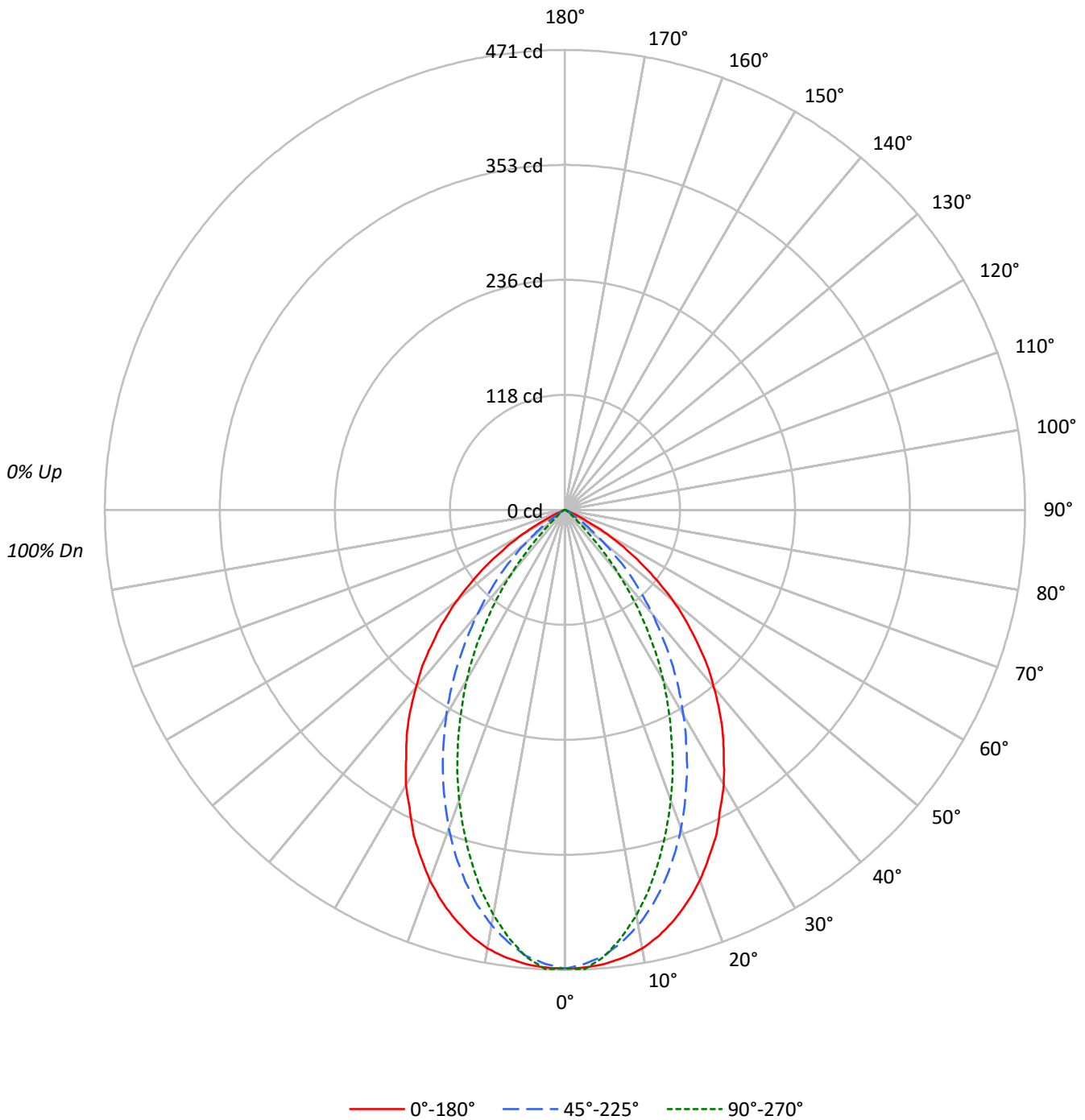
Lumens per Lamp: N/A
Luminaire Lumens: 536.1 lumens
Efficiency: N/A
Efficacy: 20.8 lumens/watt
Spacing Criteria (0/90/45): 1.06 / 0.81 / 0.94
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	
1	113	110	107	104	110	107	105	103	103	101	100	100	98	97	96	95	94	92	92	92	92	
2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	87	85	84	84	84	84	
3	100	92	87	82	98	91	86	82	88	84	80	86	82	79	83	80	78	76	76	76	76	
4	94	85	79	74	92	84	78	74	82	77	73	80	75	72	78	74	71	69	69	69	69	
5	88	79	72	67	86	78	71	67	76	70	66	74	69	65	72	68	65	63	63	63	63	
6	83	73	66	61	81	72	66	61	70	65	60	69	64	60	67	63	60	58	58	58	58	
7	78	68	61	56	77	67	60	56	66	60	56	64	59	55	63	58	55	53	53	53	53	
8	74	63	56	52	72	62	56	51	61	55	51	60	55	51	59	54	51	49	49	49	49	
9	70	59	52	48	68	58	52	48	57	52	47	56	51	47	55	51	47	46	46	46	46	
10	66	55	49	44	65	55	48	44	54	48	44	53	48	44	52	47	44	42	42	42	42	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5517	5517	5517
5°	5502	5404	5413
10°	5440	5151	5025
15°	5280	4792	4516
20°	5048	4340	3951
25°	4754	3832	3343
30°	4411	3292	2728
35°	4045	2722	2028
40°	3630	2134	1298
45°	3165	1558	540
50°	2625	926	206
55°	1937	387	156
60°	1172	143	89
65°	314	83	42
70°	0	27	27
75°	0	0	36
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3165 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.3	8.1
10°-20°	111.6	20.8
20°-30°	139.1	25.9
30°-40°	124.4	23.2
40°-50°	78.5	14.6
50°-60°	32.9	6.1
60°-70°	6.2	1.2
70°-80°	0.2	0.0
80°-90°	0.0	0.0
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°	294.0	54.8
0°-40°	418.4	78.0
0°-60°	529.7	98.8
0°-90°	536.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	536.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	470	470	470	470	470	
5°	467	466	458	460	459	44
15°	434	424	394	378	372	122
25°	367	337	296	270	258	168
35°	282	241	190	156	142	176
45°	191	148	94	50	32	147
55°	95	65	19	8	8	85
65°	11	8	3	2	2	16
75°	0	0	0	0	1	0
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	469.8	469.8	469.8	469.8	469.8
2.5°	469.1	469.8	465.3	469.8	470.6
5°	466.8	466.0	458.5	460.0	459.2
7.5°	462.2	460.0	446.4	443.3	441.8
10°	456.2	450.1	432.0	424.4	421.4
12.5°	446.4	438.0	414.6	402.5	397.9
15°	434.3	423.7	394.2	377.5	371.5
17.5°	419.9	404.7	371.5	353.3	344.2
20°	404.0	382.8	347.3	325.3	316.2
22.5°	385.1	361.6	321.5	298.1	288.2
25°	366.9	337.4	295.8	270.1	258.0
27.5°	344.2	313.2	268.6	242.1	229.2
30°	325.3	289.8	242.8	213.3	201.2
32.5°	302.6	265.5	216.4	183.8	172.5
35°	282.2	241.3	189.9	155.8	141.5
37.5°	260.2	217.9	163.4	127.9	114.2
40°	236.8	194.4	139.2	99.9	84.7
42.5°	215.6	171.0	115.0	74.1	59.0
45°	190.6	148.3	93.8	49.9	32.5
47.5°	168.0	127.1	71.1	28.0	17.4
50°	143.7	105.2	50.7	14.4	11.3
52.5°	118.8	84.0	33.3	9.8	9.1
55°	94.6	65.1	18.9	7.6	7.6
57.5°	71.1	46.9	9.8	6.1	5.3
60°	49.9	31.0	6.1	4.5	3.8
62.5°	28.7	18.2	4.5	3.0	3.0
65°	11.3	8.3	3.0	1.5	1.5
67.5°	0.8	2.3	1.5	0.8	0.8
70°	0.0	0.0	0.8	0.8	0.8
72.5°	0.0	0.0	0.8	0.8	0.8
75°	0.0	0.0	0.0	0.0	0.8
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)