

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: P1059146

Luminaire Tested: S123RDR-S1165D935-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059146
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-S1165D935-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: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

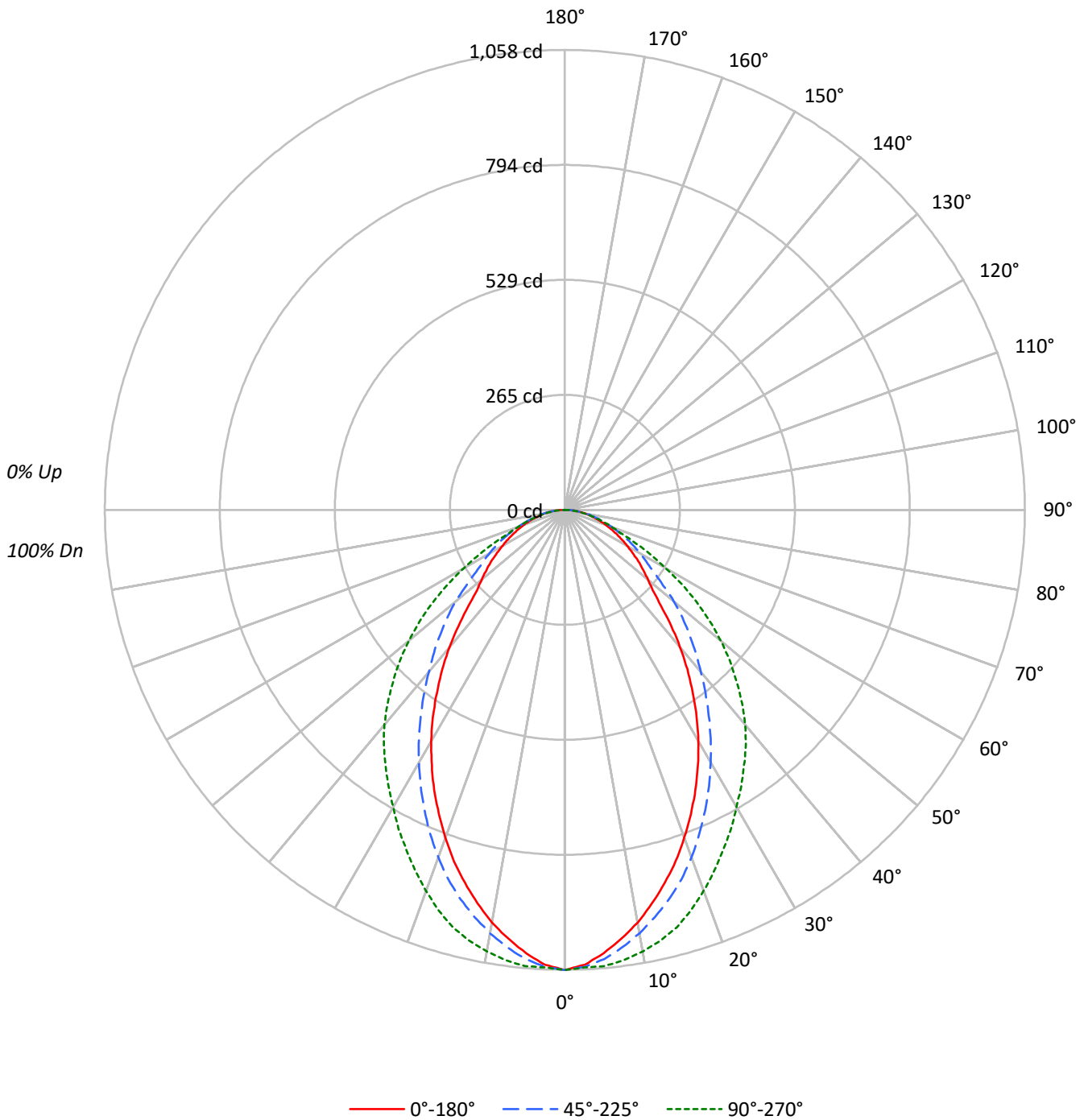
Lumens per Lamp: N/A
Luminaire Lumens: 1912.1 lumens
Efficiency: N/A
Efficacy: 45.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 1.12 / 1.1
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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				
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	65	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°	12429	12429	12429
5°	12068	12228	12418
10°	11497	11792	12296
15°	10801	11269	12084
20°	10033	10638	11661
25°	9212	9888	11174
30°	8329	9102	10701
35°	7347	8271	10300
40°	6315	7456	9892
45°	5193	6717	9273
50°	4556	5985	8546
55°	4217	5106	7571
60°	3875	4692	6266
65°	3620	4309	4932
70°	3409	3921	3921
75°	3208	3602	3380
80°	3023	3273	2854
85°	2843	3180	2169

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9273 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	97.9	5.1
10°-20°	262.4	13.7
20°-30°	355.7	18.6
30°-40°	371.9	19.5
40°-50°	322.6	16.9
50°-60°	240.0	12.6
60°-70°	154.0	8.1
70°-80°	82.6	4.3
80°-90°	25.0	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°	716.0	37.4
0°-40°	1088.0	56.9
0°-60°	1650.5	86.3
0°-90°	1912.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1912.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1058	1058	1058	1058	1058	
5°	1024	1041	1037	1045	1054	96
15°	888	910	927	964	994	249
25°	711	733	763	814	862	326
35°	512	537	577	650	718	320
45°	313	336	404	491	558	246
55°	206	211	249	320	370	184
65°	130	142	155	165	178	130
75°	71	82	79	76	74	75
85°	21	26	24	20	16	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1058.5	1058.5	1058.5	1058.5	1058.5
2.5°	1047.3	1062.2	1052.3	1052.3	1053.5
5°	1023.8	1041.1	1037.4	1044.9	1053.5
7.5°	995.2	1013.8	1015.1	1032.4	1044.9
10°	964.2	982.8	989.0	1013.8	1031.2
12.5°	927.0	948.1	959.2	990.3	1015.1
15°	888.5	909.6	927.0	964.2	994.0
17.5°	847.5	868.6	891.0	933.2	965.4
20°	802.9	825.2	851.3	893.5	933.2
22.5°	757.0	780.5	807.8	853.7	898.4
25°	711.0	733.4	763.2	814.0	862.4
27.5°	662.6	686.2	717.2	773.1	827.7
30°	614.3	637.8	671.3	730.9	789.2
32.5°	564.6	588.2	624.2	691.2	754.5
35°	512.5	537.3	577.0	650.2	718.5
37.5°	462.9	486.4	531.1	611.8	683.7
40°	412.0	436.8	486.4	573.3	645.3
42.5°	362.3	387.2	445.5	532.4	603.1
45°	312.7	336.3	404.5	491.4	558.4
47.5°	274.2	291.6	366.1	448.0	515.0
50°	249.4	255.6	327.6	405.8	467.8
52.5°	227.1	232.1	285.4	363.6	419.4
55°	206.0	211.0	249.4	320.2	369.8
57.5°	184.9	191.1	222.1	275.5	320.2
60°	165.0	172.5	199.8	235.8	266.8
62.5°	147.7	156.4	177.5	199.8	220.9
65°	130.3	141.5	155.1	165.0	177.5
67.5°	114.2	126.6	134.0	136.5	137.7
70°	99.3	111.7	114.2	114.2	114.2
72.5°	84.4	98.0	95.6	94.3	93.1
75°	70.7	81.9	79.4	75.7	74.5
77.5°	57.1	67.0	63.3	60.8	57.1
80°	44.7	52.1	48.4	45.9	42.2
82.5°	33.5	38.5	34.7	32.3	28.5
85°	21.1	26.1	23.6	19.9	16.1
87.5°	11.2	14.9	12.4	11.2	6.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)