

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: P1175394

Luminaire Tested: S125RDR-H1090D840-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175394
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)
Test Lab: INNOVATION CENTER
Issue Date: 8/18/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-H1090D840-X4F0-XX-UDD-WVL-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
HIGH PERFORMANCE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

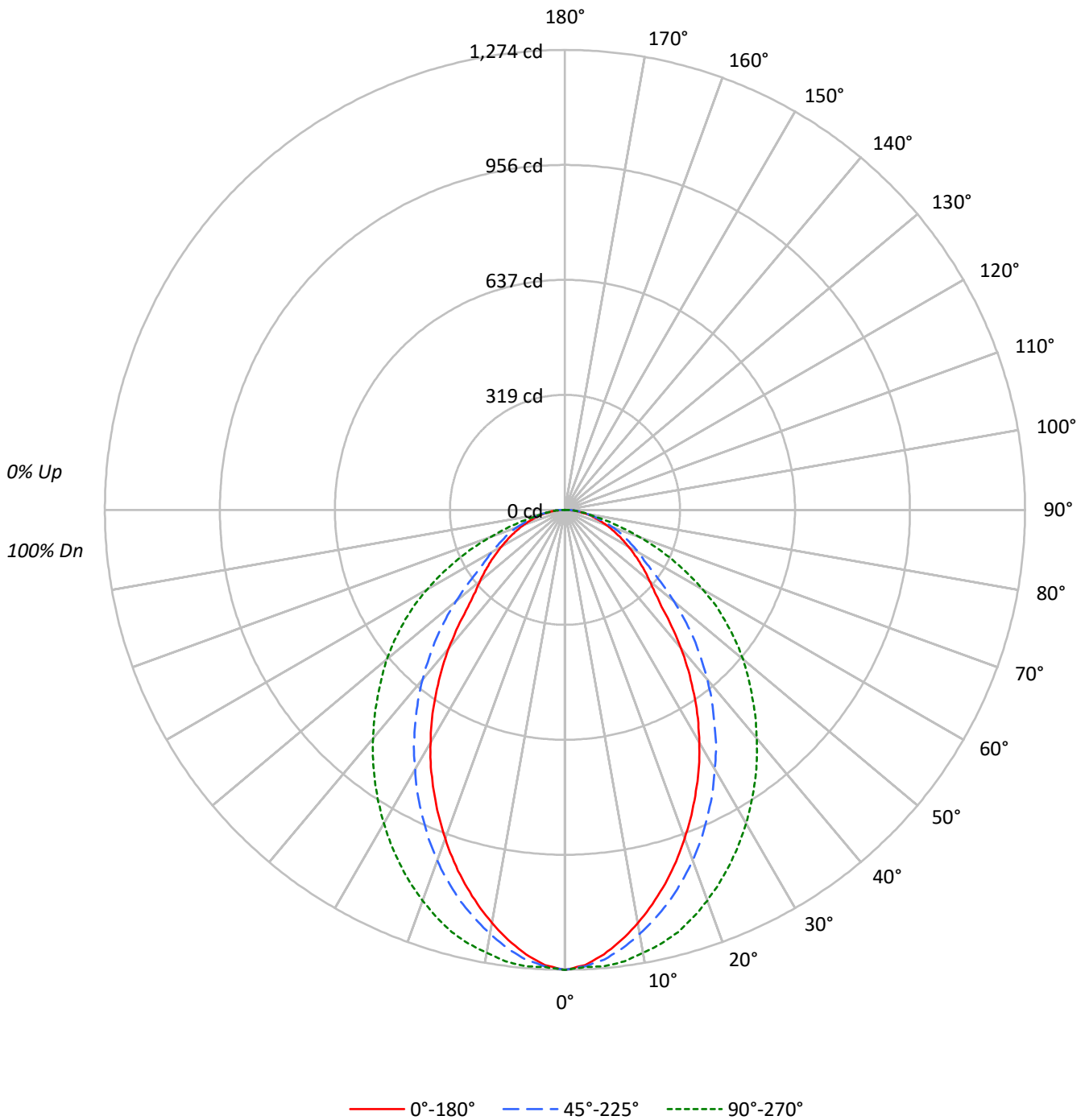
Lumens per Lamp: N/A
Luminaire Lumens: 2400.7 lumens
Efficiency: N/A
Efficacy: 76.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.2
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	107	104	100	97	99	97	94	96	93	91	92	90	88	86				
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74				
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56				
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50				
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8774	8774	8774
5°	8545	8643	8770
10°	8130	8342	8713
15°	7641	7988	8629
20°	7101	7577	8441
25°	6525	7100	8218
30°	5917	6596	7973
35°	5237	6064	7710
40°	4492	5512	7428
45°	3687	4909	7141
50°	3279	4218	6894
55°	3025	3532	6545
60°	2786	3218	6063
65°	2590	3032	5357
70°	2418	2830	4376
75°	2275	2618	3280
80°	2145	2403	2359
85°	1967	2394	1967

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7141 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.0	4.9
10°-20°	318.0	13.2
20°-30°	437.4	18.2
30°-40°	464.0	19.3
40°-50°	406.1	16.9
50°-60°	311.6	13.0
60°-70°	207.6	8.6
70°-80°	106.4	4.4
80°-90°	31.6	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°	873.4	36.4
0°-40°	1337.4	55.7
0°-60°	2055.1	85.6
0°-90°	2400.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2400.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1274	1274	1274	1274	1274	
5°	1236	1253	1250	1259	1269	116
15°	1072	1097	1121	1174	1210	300
25°	859	888	935	1014	1082	394
35°	623	652	722	828	917	388
45°	379	410	504	630	733	299
55°	252	258	294	437	545	226
65°	159	160	186	244	329	158
75°	86	91	98	104	123	91
85°	25	28	30	29	25	28
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1274.3	1274.3	1274.3	1274.3	1274.3
2.5°	1262.4	1275.4	1265.6	1266.7	1267.8
5°	1236.4	1252.7	1250.5	1259.1	1268.9
7.5°	1201.8	1219.1	1224.5	1246.2	1261.3
10°	1162.9	1182.3	1193.2	1225.6	1246.2
12.5°	1118.5	1141.2	1158.5	1200.7	1231.0
15°	1072.0	1096.9	1120.7	1173.7	1210.5
17.5°	1022.2	1047.1	1078.5	1139.1	1183.4
20°	969.2	996.3	1034.1	1099.0	1152.0
22.5°	915.1	943.3	986.5	1057.9	1118.5
25°	858.9	888.1	934.6	1013.6	1081.7
27.5°	803.7	830.8	884.9	969.2	1043.9
30°	744.2	772.4	829.7	922.7	1002.8
32.5°	684.7	712.9	778.9	876.2	960.6
35°	623.1	652.3	721.5	827.5	917.3
37.5°	561.4	591.7	668.5	777.8	873.0
40°	499.8	532.2	613.3	728.0	826.4
42.5°	437.0	471.6	557.1	679.3	781.0
45°	378.6	410.0	504.1	629.6	733.4
47.5°	336.4	354.8	447.8	578.7	688.0
50°	306.1	314.8	393.8	530.1	643.6
52.5°	279.1	284.5	340.7	484.6	595.0
55°	252.0	257.5	294.2	437.0	545.2
57.5°	226.1	229.3	259.6	389.4	495.4
60°	202.3	204.4	233.7	341.8	440.3
62.5°	180.6	181.7	208.8	293.2	385.1
65°	159.0	160.1	186.1	244.5	328.8
67.5°	139.5	139.5	164.4	200.1	274.8
70°	120.1	120.1	140.6	162.3	217.4
72.5°	102.8	104.9	119.0	130.9	169.8
75°	85.5	90.9	98.4	103.8	123.3
77.5°	69.2	75.7	79.0	81.1	82.2
80°	54.1	58.4	60.6	61.7	59.5
82.5°	40.0	43.3	44.4	44.4	41.1
85°	24.9	28.1	30.3	29.2	24.9
87.5°	11.9	16.2	17.3	15.1	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)