

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: P1175395

Luminaire Tested: S125RDR-H1090D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175395
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-H1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

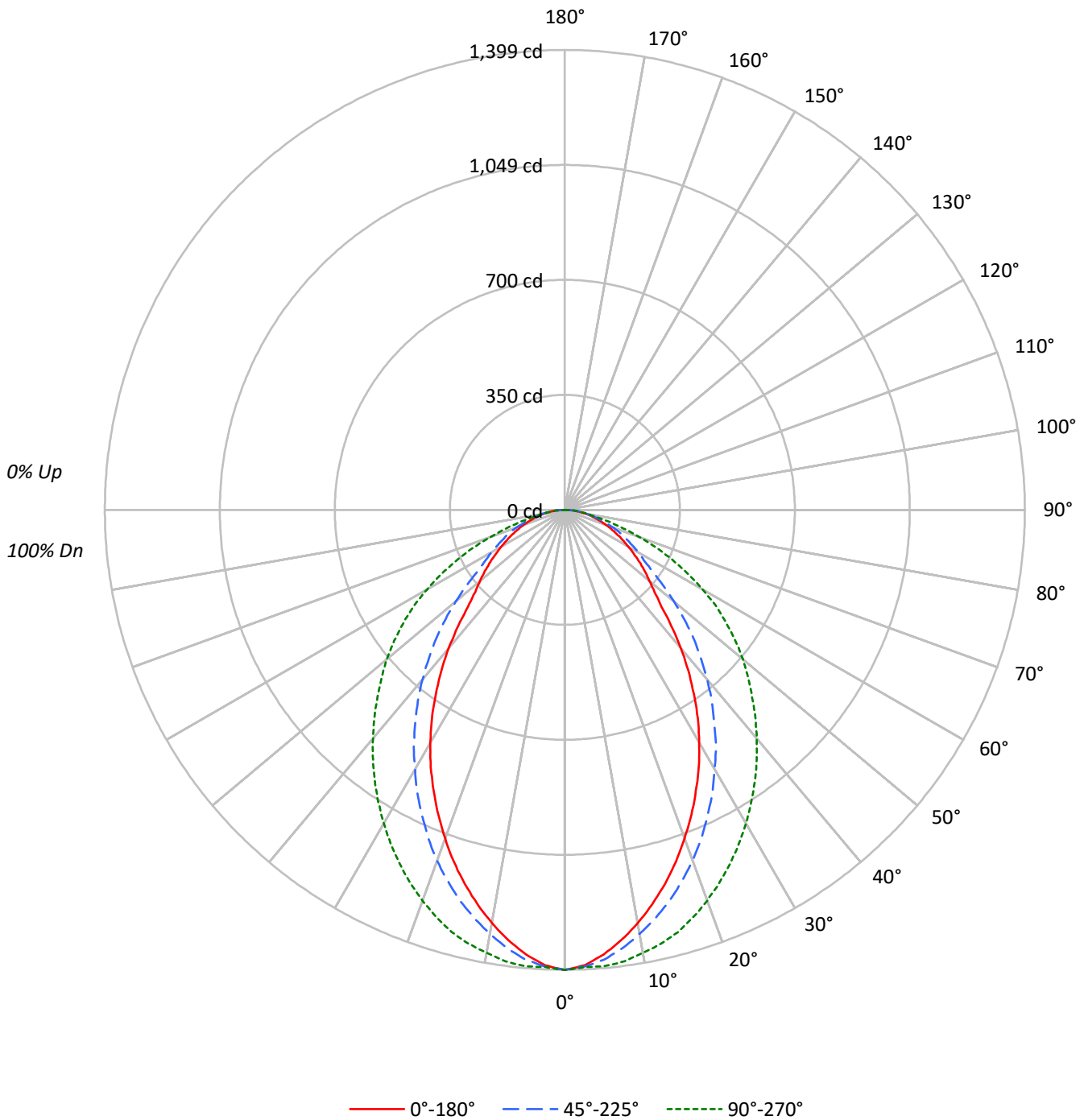
Lumens per Lamp: N/A
Luminaire Lumens: 2636.3 lumens
Efficiency: N/A
Efficacy: 84.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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			100	
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86			86	
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74			74	
3	93	84	76	71	91	82	75	70	79	73	69	77	72	68	74	70	66	64			64	
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56			56	
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50			50	
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44			44	
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40			40	
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36			36	
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33			33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30			30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9635	9635	9635
5°	9384	9491	9631
10°	8928	9161	9568
15°	8391	8773	9475
20°	7799	8321	9270
25°	7166	7798	9025
30°	6498	7244	8755
35°	5751	6660	8468
40°	4933	6054	8158
45°	4049	5391	7842
50°	3601	4632	7571
55°	3323	3879	7187
60°	3058	3534	6658
65°	2845	3328	5883
70°	2655	3108	4807
75°	2495	2876	3602
80°	2355	2637	2589
85°	2157	2631	2157

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7842 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.6	4.9
10°-20°	349.2	13.2
20°-30°	480.4	18.2
30°-40°	509.5	19.3
40°-50°	446.0	16.9
50°-60°	342.2	13.0
60°-70°	227.9	8.6
70°-80°	116.9	4.4
80°-90°	34.7	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°	959.1	36.4
0°-40°	1468.7	55.7
0°-60°	2256.8	85.6
0°-90°	2636.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2636.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1399	1399	1399	1399	1399	
5°	1358	1376	1373	1383	1393	127
15°	1177	1205	1231	1289	1329	330
25°	943	975	1026	1113	1188	433
35°	684	716	792	909	1007	426
45°	416	450	554	691	805	328
55°	277	283	323	480	599	248
65°	175	176	204	268	361	174
75°	94	100	108	114	135	100
85°	27	31	33	32	27	31
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1399.4	1399.4	1399.4	1399.4	1399.4
2.5°	1386.3	1400.6	1389.9	1391.1	1392.2
5°	1357.8	1375.6	1373.2	1382.7	1393.4
7.5°	1319.8	1338.8	1344.7	1368.5	1385.1
10°	1277.0	1298.4	1310.3	1345.9	1368.5
12.5°	1228.3	1253.3	1272.3	1318.6	1351.9
15°	1177.2	1204.6	1230.7	1288.9	1329.3
17.5°	1122.6	1149.9	1184.4	1250.9	1299.6
20°	1064.4	1094.1	1135.7	1206.9	1265.1
22.5°	1005.0	1035.9	1083.4	1161.8	1228.3
25°	943.2	975.3	1026.4	1113.1	1187.9
27.5°	882.6	912.3	971.7	1064.4	1146.3
30°	817.3	848.2	911.1	1013.3	1101.2
32.5°	752.0	782.8	855.3	962.2	1054.9
35°	684.2	716.3	792.3	908.8	1007.4
37.5°	616.5	649.8	734.1	854.1	958.7
40°	548.8	584.5	673.6	799.5	907.6
42.5°	479.9	517.9	611.8	746.0	857.7
45°	415.8	450.2	553.6	691.4	805.4
47.5°	369.4	389.6	491.8	635.5	755.5
50°	336.2	345.7	432.4	582.1	706.8
52.5°	306.5	312.4	374.2	532.2	653.4
55°	276.8	282.7	323.1	479.9	598.7
57.5°	248.3	251.8	285.1	427.7	544.1
60°	222.1	224.5	256.6	375.4	483.5
62.5°	198.4	199.6	229.3	321.9	422.9
65°	174.6	175.8	204.3	268.5	361.1
67.5°	153.2	153.2	180.6	219.8	301.7
70°	131.9	131.9	154.4	178.2	238.8
72.5°	112.9	115.2	130.7	143.7	186.5
75°	93.8	99.8	108.1	114.0	135.4
77.5°	76.0	83.2	86.7	89.1	90.3
80°	59.4	64.1	66.5	67.7	65.3
82.5°	44.0	47.5	48.7	48.7	45.1
85°	27.3	30.9	33.3	32.1	27.3
87.5°	13.1	17.8	19.0	16.6	13.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)