

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: P1175431

Luminaire Tested: S125RDR-H850D850-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2019
Report Number: P1175431
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-H850D850-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

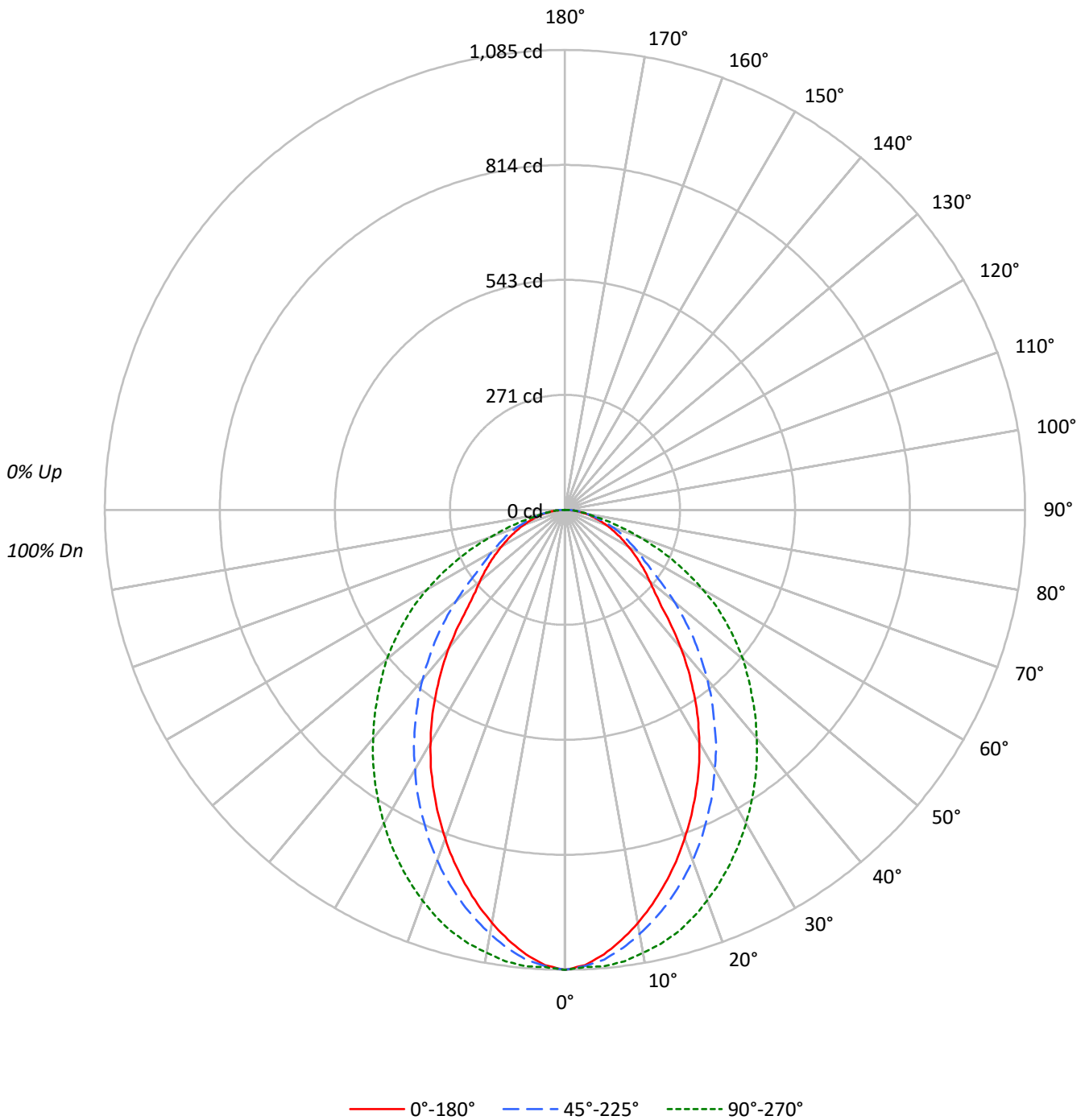
Lumens per Lamp: N/A
Luminaire Lumens: 2044.2 lumens
Efficiency: N/A
Efficacy: 87.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.5
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°	7471	7471	7471
5°	7277	7359	7468
10°	6923	7103	7419
15°	6507	6802	7347
20°	6047	6452	7188
25°	5556	6046	6998
30°	5038	5617	6789
35°	4460	5164	6565
40°	3825	4694	6325
45°	3139	4179	6081
50°	2792	3592	5871
55°	2576	3007	5573
60°	2373	2740	5163
65°	2206	2581	4562
70°	2057	2410	3726
75°	1937	2229	2793
80°	1828	2046	2010
85°	1675	2038	1675

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 6081 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.5	4.9
10°-20°	270.8	13.2
20°-30°	372.5	18.2
30°-40°	395.1	19.3
40°-50°	345.8	16.9
50°-60°	265.4	13.0
60°-70°	176.7	8.6
70°-80°	90.6	4.4
80°-90°	26.9	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°	743.7	36.4
0°-40°	1138.8	55.7
0°-60°	1750.0	85.6
0°-90°	2044.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2044.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1085	1085	1085	1085	1085	
5°	1053	1067	1065	1072	1080	99
15°	913	934	954	999	1031	256
25°	731	756	796	863	921	336
35°	531	555	614	705	781	331
45°	322	349	429	536	624	255
55°	215	219	250	372	464	192
65°	135	136	158	208	280	135
75°	73	77	84	88	105	77
85°	21	24	26	25	21	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1085.1	1085.1	1085.1	1085.1	1085.1
2.5°	1075.0	1086.0	1077.7	1078.6	1079.6
5°	1052.9	1066.7	1064.8	1072.2	1080.5
7.5°	1023.4	1038.1	1042.7	1061.1	1074.0
10°	990.2	1006.8	1016.0	1043.6	1061.1
12.5°	952.5	971.8	986.5	1022.5	1048.2
15°	912.8	934.0	954.3	999.4	1030.7
17.5°	870.5	891.7	918.4	970.0	1007.7
20°	825.3	848.4	880.6	935.9	981.0
22.5°	779.3	803.2	840.1	900.9	952.5
25°	731.4	756.2	795.9	863.1	921.1
27.5°	684.4	707.4	753.5	825.3	888.9
30°	633.7	657.7	706.5	785.7	853.9
32.5°	583.1	607.0	663.2	746.1	818.0
35°	530.6	555.4	614.4	704.7	781.1
37.5°	478.1	503.9	569.3	662.3	743.4
40°	425.6	453.2	522.3	619.9	703.7
42.5°	372.1	401.6	474.4	578.5	665.1
45°	322.4	349.1	429.2	536.1	624.5
47.5°	286.5	302.1	381.3	492.8	585.8
50°	260.7	268.0	335.3	451.4	548.1
52.5°	237.7	242.3	290.2	412.7	506.6
55°	214.6	219.2	250.5	372.1	464.3
57.5°	192.5	195.3	221.1	331.6	421.9
60°	172.3	174.1	199.0	291.1	374.9
62.5°	153.8	154.8	177.8	249.6	327.9
65°	135.4	136.3	158.4	208.2	280.0
67.5°	118.8	118.8	140.0	170.4	234.0
70°	102.2	102.2	119.7	138.2	185.1
72.5°	87.5	89.3	101.3	111.5	144.6
75°	72.8	77.4	83.8	88.4	105.0
77.5°	59.0	64.5	67.2	69.1	70.0
80°	46.1	49.7	51.6	52.5	50.7
82.5°	34.1	36.8	37.8	37.8	35.0
85°	21.2	23.9	25.8	24.9	21.2
87.5°	10.1	13.8	14.7	12.9	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)