

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: P1061774

Luminaire Tested: S125RDR-S850D835-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061774
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-85)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S850D835-X4F0-XX-UDD-WVL-S
Description: DEFINE 5 SILVER REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

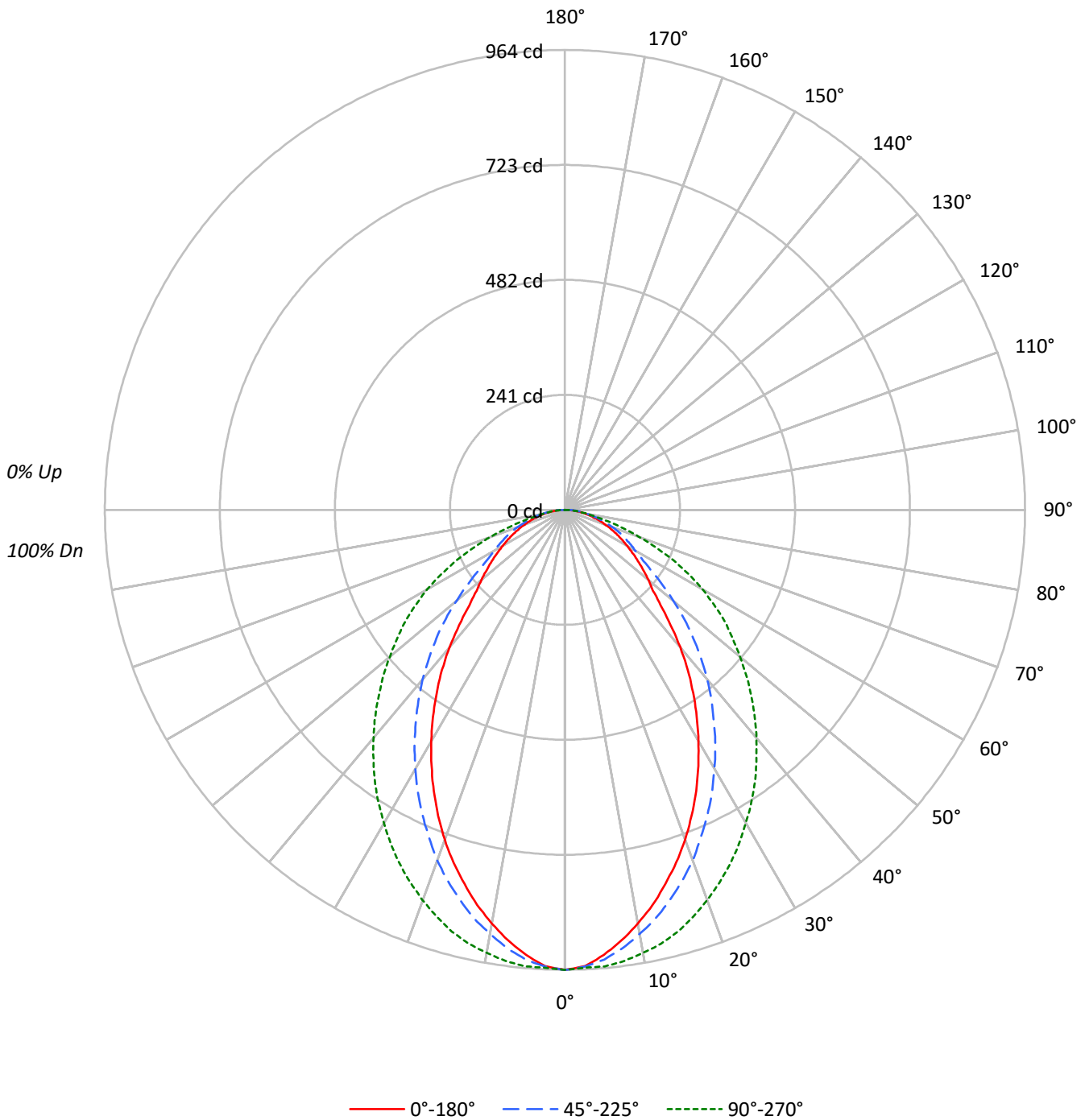
Lumens per Lamp: N/A
Luminaire Lumens: 1807.7 lumens
Efficiency: N/A
Efficacy: 70.1 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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
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	74	69	77	72	68	74	70	66				64	
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46				44	
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42				40	
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38				36	
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35				33	
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32				30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6639	6639	6639
5°	6472	6538	6638
10°	6156	6310	6594
15°	5789	6043	6524
20°	5393	5731	6381
25°	4940	5364	6220
30°	4450	4979	6027
35°	3935	4575	5838
40°	3377	4165	5610
45°	2758	3705	5375
50°	2445	3178	5129
55°	2244	2636	4914
60°	2070	2334	4577
65°	1931	2245	4081
70°	1804	2134	3336
75°	1665	1998	2461
80°	1566	1872	1796
85°	1446	1825	1525

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5375 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.2	4.9
10°-20°	240.4	13.3
20°-30°	330.4	18.3
30°-40°	350.1	19.4
40°-50°	305.6	16.9
50°-60°	232.2	12.8
60°-70°	155.6	8.6
70°-80°	80.2	4.4
80°-90°	24.1	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°	660.0	36.5
0°-40°	1010.1	55.9
0°-60°	1547.9	85.6
0°-90°	1807.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1807.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	964	964	964	964	964	
5°	936	946	946	953	960	88
15°	812	828	848	885	915	228
25°	650	670	706	765	819	298
35°	468	495	544	621	695	292
45°	283	311	380	471	552	224
55°	187	193	220	323	409	168
65°	118	121	138	184	250	118
75°	63	66	75	80	92	67
85°	18	23	23	21	19	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	964.3	964.3	964.3	964.3	964.3
2.5°	957.6	964.3	958.5	958.5	960.4
5°	936.4	946.0	946.0	952.7	960.4
7.5°	910.4	920.9	926.7	942.1	953.7
10°	880.5	892.0	902.6	925.8	943.1
12.5°	848.7	861.2	877.6	907.5	931.5
15°	812.1	827.5	847.7	885.3	915.2
17.5°	775.5	790.9	815.9	860.3	894.0
20°	736.0	752.4	782.2	830.4	870.9
22.5°	693.6	711.9	743.7	798.6	845.8
25°	650.3	670.5	706.1	764.9	818.8
27.5°	605.0	629.1	667.6	730.2	789.9
30°	559.7	583.8	626.2	694.6	758.1
32.5°	514.4	540.4	586.7	658.9	727.3
35°	468.2	495.2	544.3	621.4	694.6
37.5°	422.9	449.9	504.8	584.7	658.9
40°	375.7	403.6	463.4	547.2	624.2
42.5°	327.5	357.4	421.9	508.6	588.6
45°	283.2	311.2	380.5	471.1	552.0
47.5°	250.5	268.8	339.1	432.5	516.3
50°	228.3	237.9	296.7	395.0	478.8
52.5°	206.2	213.9	257.2	356.4	443.1
55°	186.9	192.7	219.6	322.7	409.4
57.5°	167.6	173.4	190.7	289.0	369.9
60°	150.3	155.1	169.5	253.4	332.4
62.5°	133.9	137.8	153.2	219.6	291.9
65°	118.5	121.4	137.8	184.0	250.5
67.5°	103.1	106.0	122.3	150.3	206.2
70°	89.6	90.6	106.0	122.3	165.7
72.5°	76.1	77.1	89.6	99.2	127.2
75°	62.6	66.5	75.1	80.0	92.5
77.5°	51.1	55.9	60.7	62.6	62.6
80°	39.5	45.3	47.2	47.2	45.3
82.5°	28.9	33.7	34.7	32.8	30.8
85°	18.3	23.1	23.1	21.2	19.3
87.5°	8.7	12.5	12.5	11.6	8.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)