

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: P1061452

Luminaire Tested: S125RDR-S1090D840-X4F0-XX-UDD-BVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-48)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125RDR-S1090D840-X4F0-XX-UDD-BVL-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE
LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

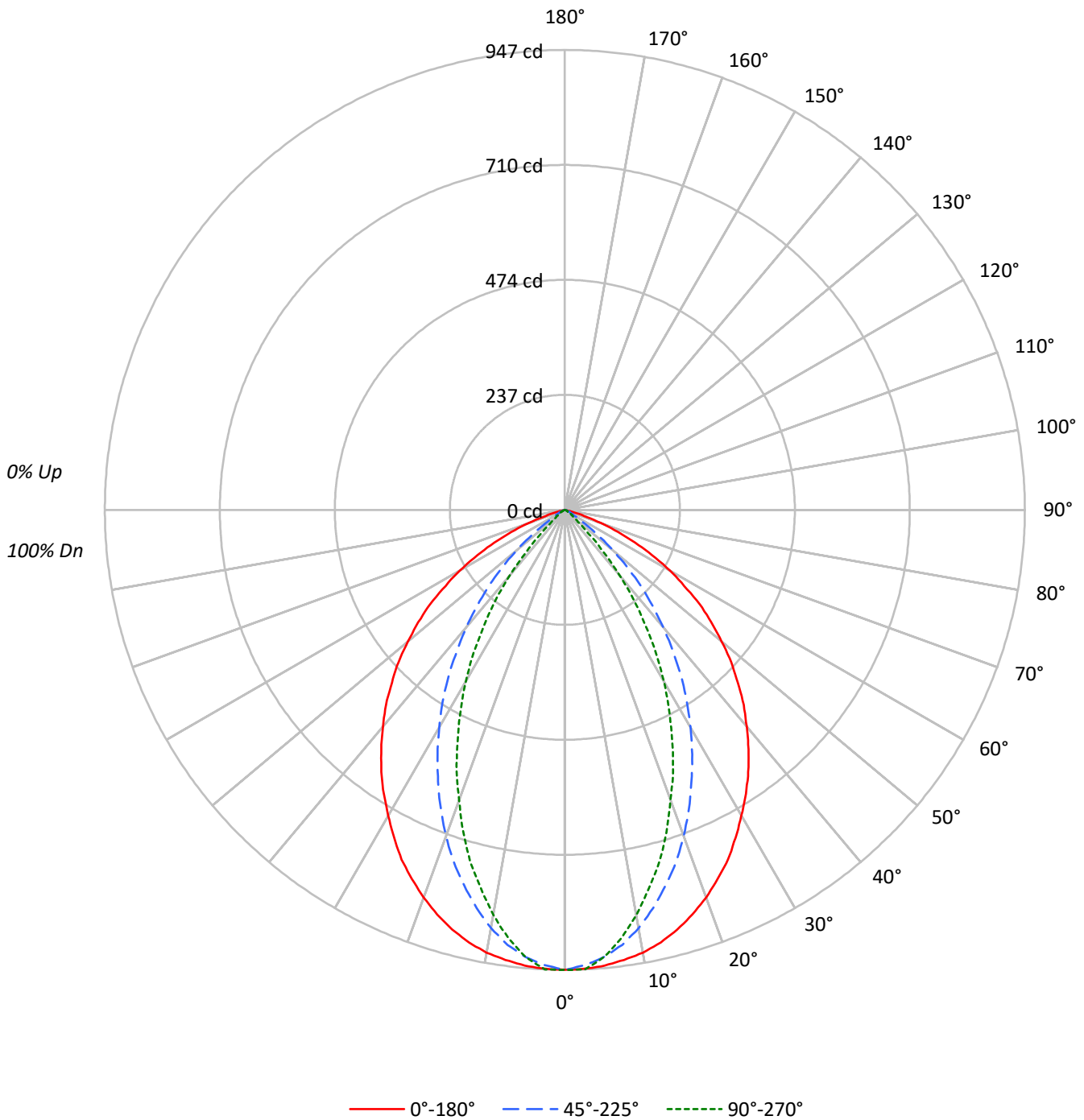
Lumens per Lamp: N/A
Luminaire Lumens: 1223.5 lumens
Efficiency: N/A
Efficacy: 35.0 lumens/watt
Spacing Criteria (0/90/45): 1.15 / 0.81 / 0.97
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
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	112	109	106	103	110	107	104	102	103	101	99	99	97	96	95	94	93	91				91
2	105	99	94	90	103	97	93	89	94	90	87	91	88	85	88	86	83	82				82
3	98	90	84	80	96	89	83	79	86	82	78	84	80	76	81	78	75	73				73
4	92	83	76	71	90	82	75	70	79	74	70	77	72	69	75	71	68	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	69	62	57	67	61	57	66	61	57	65	60	56	54				54
7	76	65	58	53	74	64	57	52	63	56	52	61	56	52	60	55	51	50				50
8	71	60	53	48	70	59	53	48	58	52	48	57	52	48	56	51	47	46				46
9	67	56	49	44	66	55	49	44	54	48	44	53	48	44	53	47	44	42				42
10	64	52	46	41	62	52	45	41	51	45	41	50	45	41	49	44	41	39				39

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6521	6521	6521
5°	6511	6390	6390
10°	6473	6115	5923
15°	6378	5709	5353
20°	6226	5237	4660
25°	6037	4690	3968
30°	5782	4113	3238
35°	5535	3508	2426
40°	5234	2830	1572
45°	4904	2141	682
50°	4511	1366	254
55°	4065	600	180
60°	3441	258	120
65°	2605	163	60
70°	1584	74	24
75°	333	32	32
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4904 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.3	7.1
10°-20°	227.6	18.6
20°-30°	292.2	23.9
30°-40°	275.1	22.5
40°-50°	192.3	15.7
50°-60°	102.7	8.4
60°-70°	41.0	3.3
70°-80°	5.3	0.4
80°-90°	0.0	0.0
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°	607.1	49.6
0°-40°	882.2	72.1
0°-60°	1177.3	96.2
0°-90°	1223.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1223.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	947	947	947	947	947	
5°	942	940	925	927	925	89
15°	895	866	801	764	751	252
25°	795	725	617	550	522	365
35°	658	554	417	322	289	411
45°	504	377	220	106	70	388
55°	339	207	50	18	15	300
65°	160	64	10	5	4	159
75°	12	4	1	1	1	24
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	947.1	947.1	947.1	947.1	947.1
2.5°	945.9	947.1	938.4	945.9	947.1
5°	942.1	939.6	924.6	927.1	924.6
7.5°	934.6	928.4	903.4	894.7	889.7
10°	925.9	912.1	874.7	855.9	847.2
12.5°	912.1	892.2	839.7	810.9	798.4
15°	894.7	865.9	800.9	763.5	751.0
17.5°	873.4	835.9	761.0	714.7	696.0
20°	849.7	799.7	714.7	659.7	636.0
22.5°	822.2	764.7	667.2	606.0	582.3
25°	794.7	724.7	617.3	549.8	522.3
27.5°	761.0	683.5	567.3	494.8	464.8
30°	727.2	642.3	517.3	438.6	407.3
32.5°	693.5	598.5	467.3	379.9	348.6
35°	658.5	553.5	417.3	322.4	288.6
37.5°	621.0	508.6	363.6	267.4	232.4
40°	582.3	464.8	314.9	213.7	174.9
42.5°	544.8	421.1	266.1	161.2	118.7
45°	503.6	377.4	219.9	106.2	70.0
47.5°	464.8	334.9	172.4	61.2	36.2
50°	421.1	291.1	127.5	32.5	23.7
52.5°	379.9	248.7	85.0	21.2	18.7
55°	338.6	207.4	50.0	17.5	15.0
57.5°	291.1	167.4	27.5	13.7	11.2
60°	249.9	131.2	18.7	10.0	8.7
62.5°	202.4	96.2	13.7	7.5	6.2
65°	159.9	63.7	10.0	5.0	3.7
67.5°	118.7	37.5	6.2	2.5	2.5
70°	78.7	20.0	3.7	1.2	1.2
72.5°	41.2	8.7	2.5	1.2	1.2
75°	12.5	3.7	1.2	1.2	1.2
77.5°	0.0	1.2	0.0	0.0	1.2
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)