

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: P1061454

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-84)
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-W
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH BLACK STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

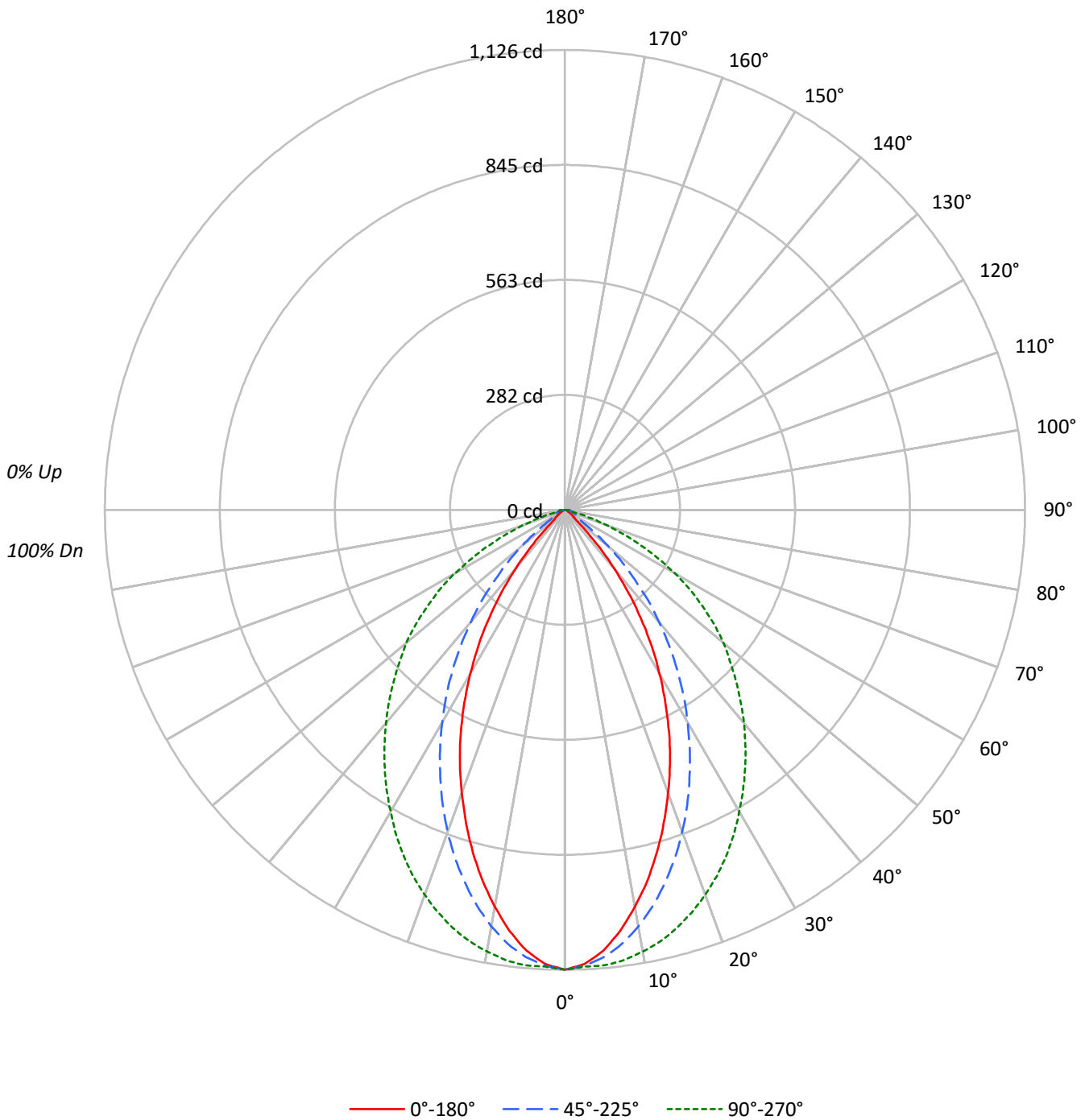
Lumens per Lamp: N/A
Luminaire Lumens: 1456.5 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 1.14 / 0.98
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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				
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				
2	104	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	80				
3	98	89	83	78	95	88	82	78	85	80	76	83	79	75	80	77	74	72				
4	91	82	75	70	89	81	74	69	78	73	68	76	71	67	74	70	67	65				
5	85	75	68	63	83	74	67	62	72	66	62	70	65	61	69	64	60	59				
6	80	69	62	57	78	68	61	56	67	60	56	65	60	56	64	59	55	53				
7	75	64	57	52	74	63	56	51	62	56	51	60	55	51	59	54	50	49				
8	71	59	52	47	69	59	52	47	58	51	47	56	51	47	55	50	46	45				
9	67	55	48	44	65	55	48	44	54	48	43	53	47	43	52	47	43	41				
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	49	44	40	38				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7751	7751	7751
5°	7487	7599	7737
10°	6900	7241	7678
15°	6196	6740	7552
20°	5407	6150	7351
25°	4580	5483	7099
30°	3679	4773	6782
35°	2723	4027	6466
40°	1686	3215	6127
45°	657	2351	5762
50°	308	1474	5426
55°	226	630	4925
60°	156	448	4272
65°	103	469	3322
70°	101	429	2090
75°	133	434	665
80°	198	496	448
85°	300	987	695

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 5762 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.2	7.1
10°-20°	267.5	18.4
20°-30°	340.7	23.4
30°-40°	317.1	21.8
40°-50°	218.3	15.0
50°-60°	123.6	8.5
60°-70°	58.4	4.0
70°-80°	18.3	1.3
80°-90°	9.5	0.7
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°	711.4	48.8
0°-40°	1028.5	70.6
0°-60°	1370.4	94.1
0°-90°	1456.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1456.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1126	1126	1126	1126	1126	
5°	1083	1098	1100	1110	1120	100
15°	869	898	946	1017	1060	242
25°	603	642	722	843	934	275
35°	324	369	479	643	769	200
45°	68	108	241	436	592	64
55°	19	21	52	251	410	17
65°	6	8	29	90	204	7
75°	5	11	16	18	25	5
85°	4	10	12	11	9	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1125.8	1125.8	1125.8	1125.8	1125.8
2.5°	1113.3	1124.5	1117.0	1118.3	1119.5
5°	1083.2	1098.2	1099.5	1109.5	1119.5
7.5°	1039.5	1058.2	1072.0	1095.7	1112.0
10°	986.9	1009.4	1035.7	1074.5	1098.2
12.5°	930.6	956.9	993.2	1048.2	1082.0
15°	869.3	898.1	945.6	1016.9	1059.5
17.5°	804.3	836.8	894.4	979.4	1033.2
20°	738.0	773.0	839.3	936.9	1003.2
22.5°	671.7	708.0	781.8	890.6	970.7
25°	602.9	641.7	721.7	843.1	934.4
27.5°	532.9	572.9	661.7	794.3	895.6
30°	462.8	505.3	600.4	744.3	853.1
32.5°	394.0	436.5	540.4	694.2	811.8
35°	324.0	369.0	479.1	642.9	769.3
37.5°	253.9	302.7	419.0	590.4	725.5
40°	187.6	233.9	357.7	539.1	681.7
42.5°	125.1	170.1	302.7	487.8	636.7
45°	67.5	107.6	241.4	436.5	591.7
47.5°	36.3	57.5	188.9	386.5	547.9
50°	28.8	32.5	137.6	340.2	506.6
52.5°	23.8	26.3	90.1	296.5	459.1
55°	18.8	21.3	52.5	251.4	410.3
57.5°	15.0	17.5	33.8	208.9	362.7
60°	11.3	13.8	32.5	167.6	310.2
62.5°	8.8	10.0	30.0	128.8	255.2
65°	6.3	7.5	28.8	90.1	203.9
67.5°	5.0	6.3	26.3	57.5	152.6
70°	5.0	5.0	21.3	37.5	103.8
72.5°	5.0	8.8	18.8	25.0	62.5
75°	5.0	11.3	16.3	17.5	25.0
77.5°	5.0	12.5	13.8	13.8	13.8
80°	5.0	11.3	12.5	12.5	11.3
82.5°	5.0	10.0	11.3	12.5	10.0
85°	3.8	10.0	12.5	11.3	8.8
87.5°	3.8	10.0	11.3	10.0	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)