

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: P1061468

Luminaire Tested: S125RDR-S1090D850-X4F0-XX-UDD-WVL-S

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061468
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-S1090D850-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: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

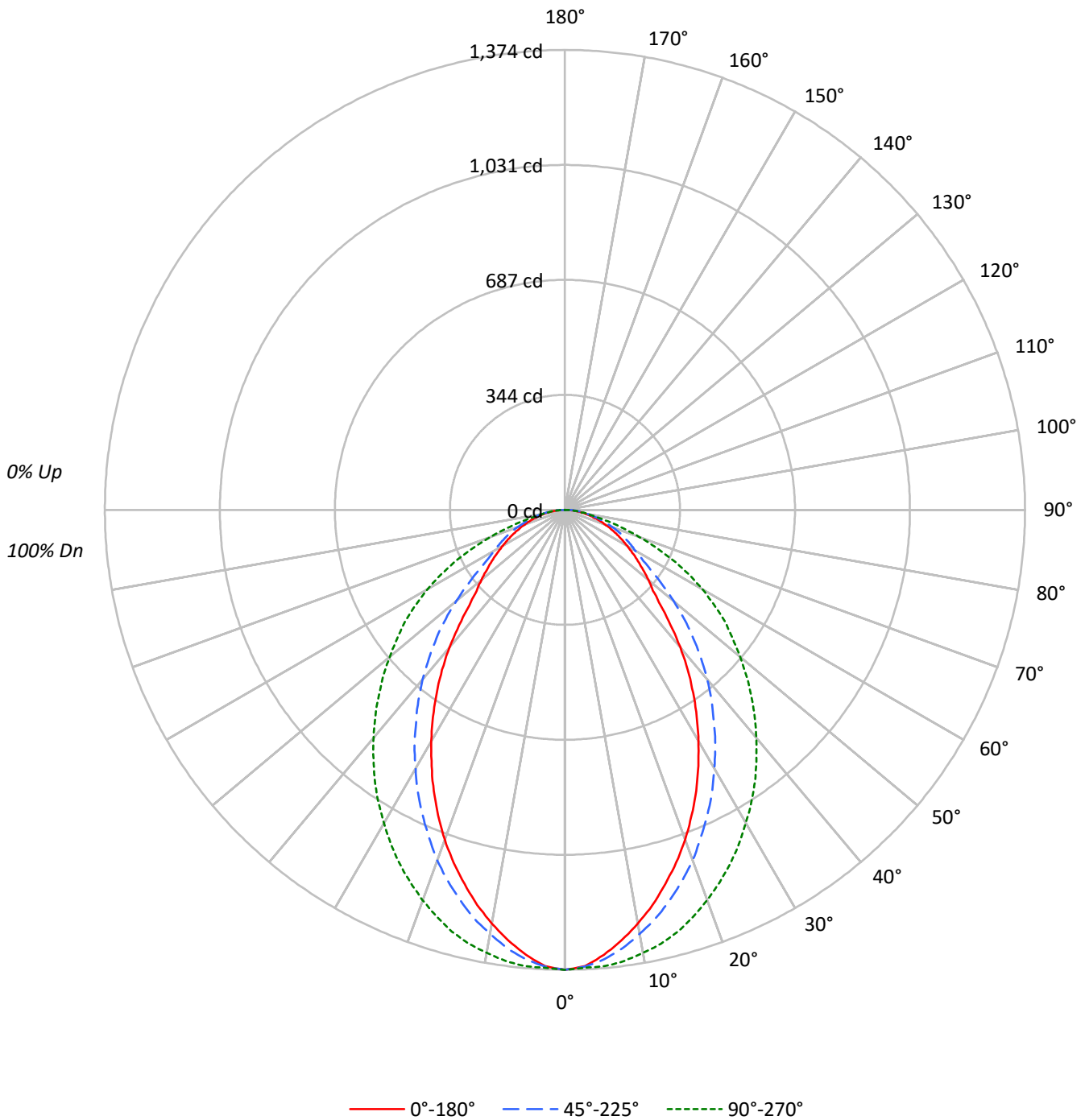
Lumens per Lamp: N/A
Luminaire Lumens: 2576.2 lumens
Efficiency: N/A
Efficacy: 73.6 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1061468

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-WVL-S

Luminous Intensity Polar Plot





TEST NUMBER: P1061468

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	74	69	77	72	68	74	70	66	64			64																
4	86	75	67	61	84	74	67	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	48	59	52	47	58	52	47	56	51	46	44			44																
7	69	57	49	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40			40																
8	65	52	44	39	63	52	44	39	50	43	38	49	43	38	48	42	38	36			36																
9	61	48	41	35	59	48	40	35	47	40	35	46	39	35	45	39	35	33			33																
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30			30																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9462	9462	9462
5°	9223	9318	9461
10°	8773	8994	9397
15°	8249	8611	9296
20°	7685	8168	9094
25°	7040	7645	8866
30°	6341	7095	8590
35°	5608	6520	8320
40°	4812	5936	7996
45°	3930	5280	7660
50°	3486	4529	7308
55°	3197	3757	7004
60°	2950	3327	6522
65°	2752	3198	5815
70°	2571	3040	4753
75°	2373	2849	3506
80°	2232	2668	2557
85°	2062	2599	2172

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 7660 cd/sqm

TEST NUMBER: P1061468

CATALOG NUMBER: S125RDR-S1090D850-X4F0-XX-UDD-WVL-S

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	4.9
10°-20°	342.6	13.3
20°-30°	470.8	18.3
30°-40°	499.0	19.4
40°-50°	435.5	16.9
50°-60°	330.9	12.8
60°-70°	221.7	8.6
70°-80°	114.3	4.4
80°-90°	34.3	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°	940.5	36.5
0°-40°	1439.5	55.9
0°-60°	2206.0	85.6
0°-90°	2576.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2576.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1374	1374	1374	1374	1374	
5°	1334	1348	1348	1358	1369	125
15°	1157	1179	1208	1262	1304	325
25°	927	956	1006	1090	1167	425
35°	667	706	776	886	990	416
45°	404	443	542	671	787	319
55°	266	275	313	460	584	239
65°	169	173	196	262	357	168
75°	89	95	107	114	132	96
85°	26	33	33	30	28	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.3	1374.3	1374.3	1374.3	1374.3
2.5°	1364.6	1374.3	1366.0	1366.0	1368.8
5°	1334.4	1348.2	1348.2	1357.8	1368.8
7.5°	1297.4	1312.5	1320.7	1342.7	1359.2
10°	1254.8	1271.3	1286.4	1319.3	1344.1
12.5°	1209.5	1227.4	1250.7	1293.3	1327.6
15°	1157.3	1179.3	1208.1	1261.7	1304.2
17.5°	1105.2	1127.1	1162.8	1226.0	1274.0
20°	1048.9	1072.2	1114.8	1183.4	1241.1
22.5°	988.5	1014.6	1059.9	1138.1	1205.4
25°	926.7	955.5	1006.3	1090.1	1167.0
27.5°	862.2	896.5	951.4	1040.6	1125.8
30°	797.6	832.0	892.4	989.8	1080.5
32.5°	733.1	770.2	836.1	939.1	1036.5
35°	667.2	705.7	775.7	885.5	989.8
37.5°	602.7	641.1	719.4	833.3	939.1
40°	535.4	575.2	660.4	779.8	889.6
42.5°	466.8	509.3	601.3	724.9	838.8
45°	403.6	443.4	542.3	671.3	786.7
47.5°	356.9	383.0	483.3	616.4	735.9
50°	325.4	339.1	422.8	562.9	682.3
52.5°	293.8	304.8	366.6	508.0	631.5
55°	266.3	274.6	313.0	459.9	583.5
57.5°	238.9	247.1	271.8	411.9	527.2
60°	214.2	221.0	241.6	361.1	473.6
62.5°	190.8	196.3	218.3	313.0	416.0
65°	168.9	173.0	196.3	262.2	356.9
67.5°	146.9	151.0	174.4	214.2	293.8
70°	127.7	129.1	151.0	174.4	236.1
72.5°	108.5	109.8	127.7	141.4	181.2
75°	89.2	94.7	107.1	113.9	131.8
77.5°	72.8	79.6	86.5	89.2	89.2
80°	56.3	64.5	67.3	67.3	64.5
82.5°	41.2	48.1	49.4	46.7	43.9
85°	26.1	32.9	32.9	30.2	27.5
87.5°	12.4	17.8	17.8	16.5	12.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)