

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: P1061467

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061467
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-46)
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-B
Description: DEFINE 5 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

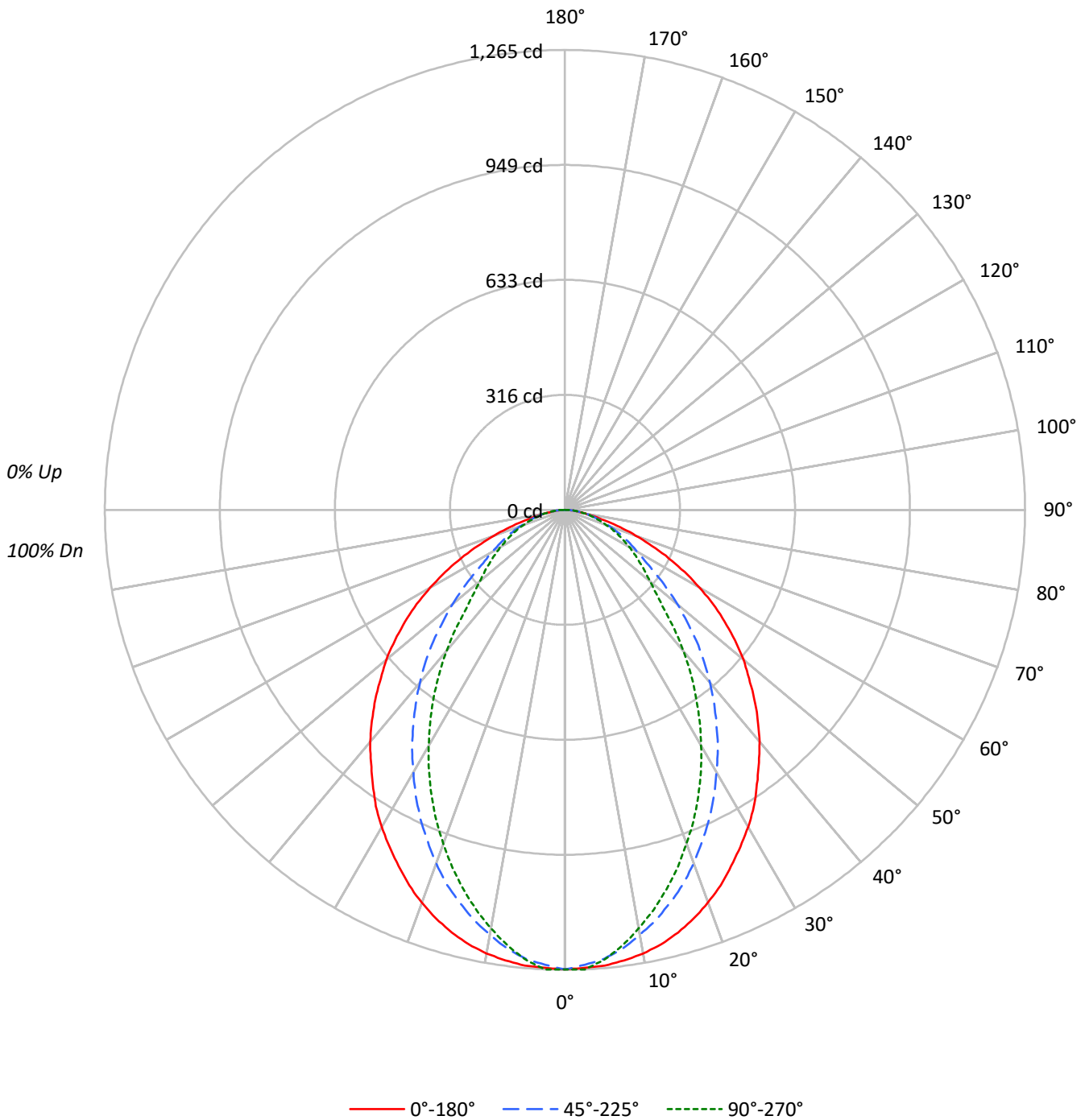
Lumens per Lamp: N/A
Luminaire Lumens: 2394.2 lumens
Efficiency: N/A
Efficacy: 68.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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: P1061467

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

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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	100	100	100	100	100														
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87	87	87	87	87														
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75	75	75	75	75	75	75														
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65	65	65	65	65	65	65														
4	86	75	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57	57	57	57	57	57	57														
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50	50	50	50	50	50	50														
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45	45	45	45	45	45	45														
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40	40	40	40	40	40	40														
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36	36	36	36	36	36	36														
9	61	48	41	35	60	48	40	35	47	40	35	46	39	35	45	39	35	33	33	33	33	33	33	33														
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	42	36	32	30	30	30	30	30	30	30														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8702	8702	8702
5°	8697	8564	8583
10°	8663	8299	8174
15°	8578	7972	7698
20°	8425	7581	7159
25°	8215	7131	6588
30°	8008	6622	5956
35°	7740	6113	5283
40°	7486	5574	4552
45°	7175	4983	3728
50°	6864	4321	3263
55°	6440	3607	3014
60°	5877	3156	2816
65°	5142	2884	2616
70°	4171	2597	2432
75°	2993	2373	2264
80°	2066	2121	2121
85°	1517	1841	1951

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7175 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.5	4.9
10°-20°	317.8	13.3
20°-30°	439.3	18.3
30°-40°	467.9	19.5
40°-50°	411.0	17.2
50°-60°	311.7	13.0
60°-70°	202.4	8.5
70°-80°	100.3	4.2
80°-90°	26.2	1.1
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°	874.6	36.5
0°-40°	1342.5	56.1
0°-60°	2065.3	86.3
0°-90°	2394.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2394.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1258	1256	1239	1243	1242	119
15°	1203	1176	1118	1092	1080	339
25°	1081	1022	939	891	867	498
35°	921	836	727	661	628	576
45°	737	634	512	420	383	568
55°	536	431	300	259	251	479
65°	316	235	177	163	161	312
75°	112	99	89	86	85	125
85°	19	22	23	23	25	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1263.8	1263.8	1263.8	1263.8	<i>1263.8</i>
2.5°	<i>1261.1</i>	<i>1263.8</i>	<i>1252.8</i>	<i>1262.5</i>	<i>1265.2</i>
5°	1258.3	1255.6	1239.1	1243.2	<i>1241.9</i>
7.5°	1250.1	1244.6	1217.2	1214.4	<i>1208.9</i>
10°	1239.1	1225.4	1187.0	1177.4	<i>1169.1</i>
12.5°	1224.0	1202.1	1155.4	1136.2	<i>1126.6</i>
15°	1203.4	1176.0	1118.4	1092.3	<i>1079.9</i>
17.5°	1178.7	1140.3	1079.9	1044.3	<i>1030.5</i>
20°	1149.9	1104.6	1034.7	993.5	<i>977.0</i>
22.5°	1118.4	1064.9	986.6	942.7	<i>924.9</i>
25°	1081.3	1022.3	938.6	890.6	<i>867.2</i>
27.5°	1044.3	978.4	887.8	834.3	<i>809.6</i>
30°	1007.2	931.7	832.9	775.3	<i>749.2</i>
32.5°	967.4	883.7	782.2	719.0	<i>688.9</i>
35°	920.8	835.7	727.3	661.4	<i>628.5</i>
37.5°	875.5	784.9	673.8	599.7	<i>568.1</i>
40°	832.9	736.9	620.2	539.3	<i>506.4</i>
42.5°	784.9	686.1	566.7	481.7	<i>444.6</i>
45°	736.9	634.0	511.8	419.9	<i>382.9</i>
47.5°	686.1	584.6	454.2	363.6	<i>338.9</i>
50°	640.8	533.8	403.4	321.1	<i>304.6</i>
52.5°	588.7	484.4	351.3	288.2	<i>277.2</i>
55°	536.5	430.9	300.5	259.4	<i>251.1</i>
57.5°	483.0	382.9	260.7	234.7	<i>226.4</i>
60°	426.8	333.5	229.2	208.6	<i>204.5</i>
62.5°	370.5	282.7	201.7	186.6	<i>181.1</i>
65°	315.6	234.7	177.0	163.3	<i>160.6</i>
67.5°	259.4	190.7	152.3	142.7	<i>141.3</i>
70°	207.2	155.1	129.0	123.5	<i>120.8</i>
72.5°	159.2	123.5	108.4	104.3	<i>102.9</i>
75°	112.5	98.8	89.2	86.5	<i>85.1</i>
77.5°	75.5	75.5	71.4	68.6	<i>70.0</i>
80°	52.1	54.9	53.5	53.5	<i>53.5</i>
82.5°	34.3	37.1	38.4	38.4	<i>38.4</i>
85°	19.2	22.0	23.3	23.3	<i>24.7</i>
87.5°	6.9	8.2	9.6	11.0	<i>11.0</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)