

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: P1175347

Luminaire Tested: S125RDR-S1090D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1175347  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-82)  
Test Lab: INNOVATION CENTER  
Issue Date: 8/18/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125RDR-S1090D830-X4F0-XX-UDD-WVL-W  
Description: DEFINE 5 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE  
LOUVER WITH DIFFUSER  
CORE LIGHT ENGINE  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: -

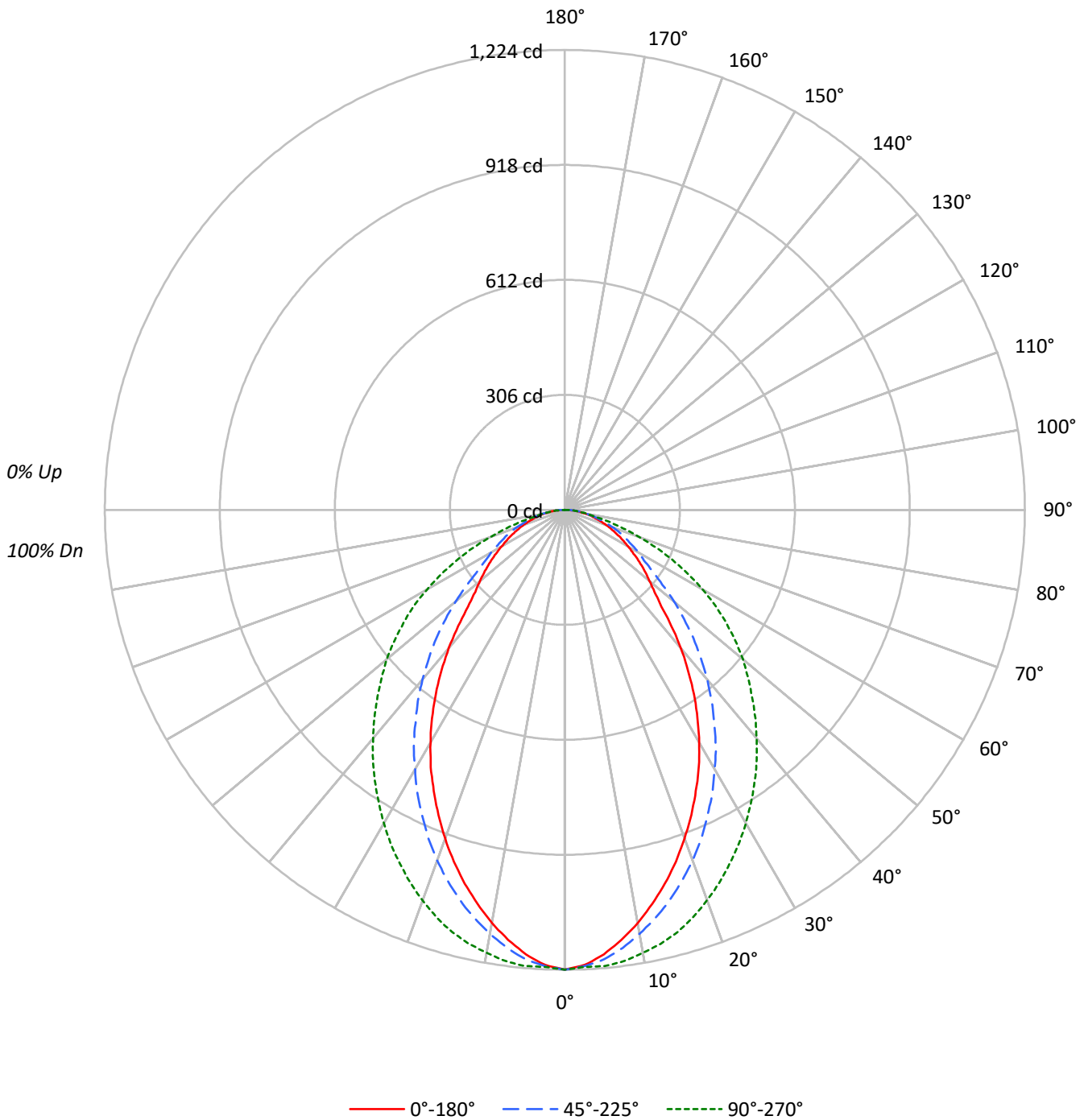
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2305.6 lumens  
Efficiency: N/A  
Efficacy: 65.9 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

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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	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	73	69	77	72	68	74	70	66	64				
4	86	75	67	61	84	74	66	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	47	59	52	47	58	51	47	56	51	46	44				
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40				
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36				
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33				
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8426	8426	8426
5°	8207	8301	8422
10°	7808	8012	8367
15°	7339	7672	8286
20°	6821	7277	8107
25°	6267	6819	7893
30°	5683	6335	7657
35°	5030	5824	7405
40°	4314	5295	7134
45°	3540	4714	6859
50°	3149	4051	6621
55°	2906	3392	6285
60°	2676	3090	5822
65°	2488	2911	5145
70°	2321	2720	4203
75°	2184	2514	3150
80°	2058	2308	2264
85°	1888	2299	1888

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 90°  
 Vertical Angle: 45°  
 Luminance: 6859 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.3	4.9
10°-20°	305.4	13.2
20°-30°	420.1	18.2
30°-40°	445.6	19.3
40°-50°	390.0	16.9
50°-60°	299.3	13.0
60°-70°	199.3	8.6
70°-80°	102.2	4.4
80°-90°	30.3	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°	838.8	36.4
0°-40°	1284.4	55.7
0°-60°	1973.7	85.6
0°-90°	2305.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2305.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1224	1224	1224	1224	1224	
5°	1188	1203	1201	1209	1219	111
15°	1030	1053	1076	1127	1162	289
25°	825	853	898	974	1039	379
35°	598	626	693	795	881	373
45°	364	394	484	605	704	287
55°	242	247	283	420	524	217
65°	153	154	179	235	316	152
75°	82	87	94	100	118	87
85°	24	27	29	28	24	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1223.8	1223.8	1223.8	1223.8	1223.8
2.5°	1212.4	1224.9	1215.5	1216.6	1217.6
5°	1187.5	1203.0	1201.0	1209.3	1218.6
7.5°	1154.2	1170.8	1176.0	1196.8	1211.4
10°	1116.8	1135.5	1145.9	1177.1	1196.8
12.5°	1074.2	1096.0	1112.7	1153.2	1182.3
15°	1029.6	1053.4	1076.3	1127.2	1162.5
17.5°	981.8	1005.7	1035.8	1094.0	1136.6
20°	930.9	956.8	993.2	1055.5	1106.4
22.5°	878.9	905.9	947.5	1016.0	1074.2
25°	824.9	852.9	897.6	973.5	1038.9
27.5°	771.9	797.9	849.8	930.9	1002.5
30°	714.8	741.8	796.8	886.2	963.1
32.5°	657.6	684.6	748.0	841.5	922.5
35°	598.4	626.5	692.9	794.8	881.0
37.5°	539.2	568.3	642.0	747.0	838.4
40°	480.0	511.1	589.1	699.2	793.7
42.5°	419.7	453.0	535.0	652.4	750.1
45°	363.6	393.7	484.1	604.6	704.4
47.5°	323.1	340.8	430.1	555.8	660.7
50°	294.0	302.3	378.2	509.1	618.1
52.5°	268.0	273.2	327.3	465.4	571.4
55°	242.1	247.3	282.6	419.7	523.6
57.5°	217.1	220.2	249.3	374.0	475.8
60°	194.3	196.4	224.4	328.3	422.8
62.5°	173.5	174.5	200.5	281.5	369.8
65°	152.7	153.8	178.7	234.8	315.8
67.5°	134.0	134.0	157.9	192.2	263.9
70°	115.3	115.3	135.1	155.8	208.8
72.5°	98.7	100.8	114.3	125.7	163.1
75°	82.1	87.3	94.5	99.7	118.4
77.5°	66.5	72.7	75.8	77.9	79.0
80°	51.9	56.1	58.2	59.2	57.1
82.5°	38.4	41.6	42.6	42.6	39.5
85°	23.9	27.0	29.1	28.1	23.9
87.5°	11.4	15.6	16.6	14.5	11.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)