

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2024 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: S125RDRP-S1090D830-X4F0-XX-UDD-WVL-W

Issue Date: 8/18/2025

Test Information

Test Method: LM-79-2024
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: S125RDRP-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

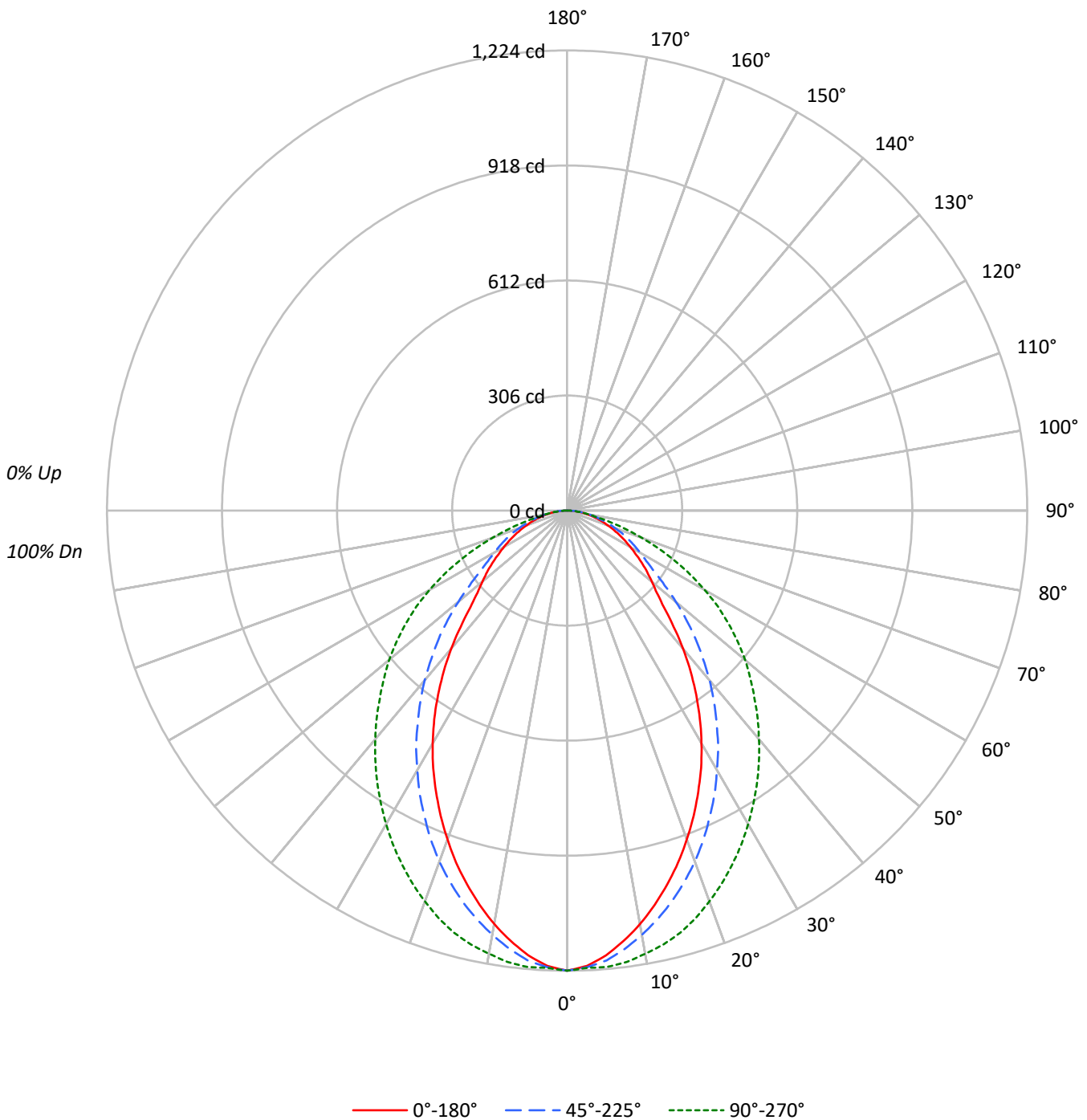
Lumens per Lamp: N/A
Luminaire Lumens: 2305.6 lumens
Efficiency: N/A
Efficacy: 65.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.18 / 1.12
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 35
Input Voltage (V): 120
Input Current (A_{in}): 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	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

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	14.02	15.52	14.38	15.83	16.15	18.05	19.54	18.41	19.86	20.17
	3H	15.61	16.95	15.98	17.28	17.64	19.43	20.78	19.81	21.10	21.47
	4H	16.25	17.51	16.65	17.86	18.24	19.84	21.10	20.24	21.45	21.83
	6H	16.76	17.92	17.17	18.29	18.68	20.04	21.21	20.46	21.58	21.97
	8H	16.94	18.05	17.37	18.44	18.84	20.10	21.21	20.53	21.60	22.00
	12H	17.07	18.13	17.50	18.51	18.94	20.13	21.20	20.57	21.58	22.01
4H	2H	14.79	16.05	15.19	16.40	16.78	18.18	19.44	18.58	19.78	20.16
	3H	16.57	17.62	16.98	18.02	18.42	19.74	20.79	20.16	21.19	21.59
	4H	17.34	18.28	17.77	18.70	19.14	20.25	21.20	20.69	21.61	22.05
	6H	17.98	18.80	18.44	19.24	19.70	20.58	21.40	21.04	21.84	22.30
	8H	18.21	18.97	18.67	19.42	19.89	20.68	21.45	21.14	21.89	22.36
	12H	18.38	19.06	18.86	19.54	20.01	20.75	21.44	21.24	21.91	22.39
8H	4H	17.72	18.49	18.19	18.93	19.40	20.35	21.12	20.82	21.56	22.03
	6H	18.50	19.13	19.00	19.62	20.10	20.77	21.41	21.27	21.90	22.38
	8H	18.82	19.38	19.33	19.89	20.38	20.93	21.50	21.45	22.01	22.50
	12H	19.08	19.58	19.59	20.07	20.64	21.07	21.57	21.58	22.07	22.63
12H	4H	17.76	18.45	18.25	18.93	19.40	20.35	21.04	20.84	21.52	21.99
	6H	18.57	19.14	19.09	19.65	20.14	20.79	21.35	21.30	21.86	22.35
	8H	18.96	19.46	19.47	19.95	20.52	21.00	21.50	21.51	21.99	22.56