

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: P1061440

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

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1061440
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-S1090D830-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: 3000K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

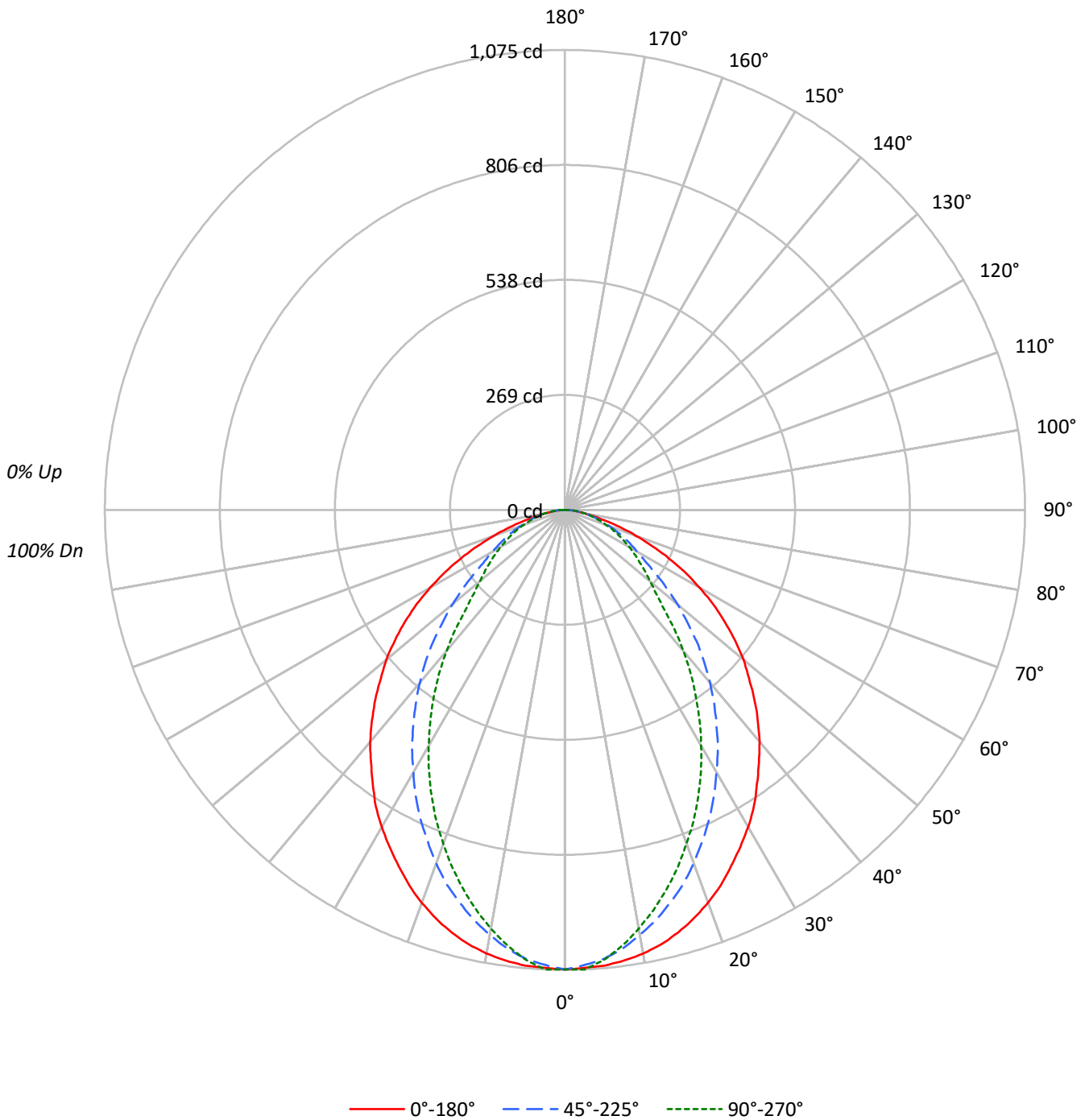
Lumens per Lamp: N/A
Luminaire Lumens: 2034.8 lumens
Efficiency: N/A
Efficacy: 58.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.95 / 1.11
Luminous Opening: Rectangular (W 0.39' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									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													100															
1	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87													87															
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	80	77	75													75															
3	93	84	77	71	91	82	76	70	80	74	69	77	72	68	74	70	67	65													65															
4	86	76	68	61	84	74	67	61	72	65	60	70	64	59	67	63	59	57													57															
5	80	68	60	54	78	67	59	54	65	58	53	63	57	53	61	56	52	50													50															
6	74	62	54	48	73	61	53	48	59	53	47	58	52	47	56	51	47	45													45															
7	69	57	49	43	68	56	48	43	55	48	43	53	47	42	52	46	42	40													40															
8	65	52	44	39	63	52	44	39	50	43	39	49	43	38	48	42	38	36													36															
9	61	48	41	35	60	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°	7395	7395	7395
5°	7392	7279	7295
10°	7363	7053	6947
15°	7291	6775	6542
20°	7161	6443	6084
25°	6982	6060	5600
30°	6806	5628	5063
35°	6578	5195	4489
40°	6363	4738	3868
45°	6098	4236	3168
50°	5833	3673	2773
55°	5474	3066	2562
60°	4995	2682	2393
65°	4369	2450	2224
70°	3545	2206	2065
75°	2543	2016	1923
80°	1757	1804	1804
85°	1288	1564	1659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6098 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	99.9	4.9
10°-20°	270.1	13.3
20°-30°	373.4	18.3
30°-40°	397.7	19.5
40°-50°	349.3	17.2
50°-60°	264.9	13.0
60°-70°	172.0	8.5
70°-80°	85.2	4.2
80°-90°	22.3	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°	743.3	36.5
0°-40°	1141.0	56.1
0°-60°	1755.3	86.3
0°-90°	2034.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2034.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1074	1074	1074	1074	1074	
5°	1070	1067	1053	1057	1056	102
15°	1023	1000	950	928	918	288
25°	919	869	798	757	737	423
35°	783	710	618	562	534	490
45°	626	539	435	357	325	483
55°	456	366	255	220	213	407
65°	268	199	150	139	136	265
75°	96	84	76	74	72	107
85°	16	19	20	20	21	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1074.1	1074.1	1074.1	1074.1	1074.1
2.5°	1071.8	1074.1	1064.8	1073.0	1075.3
5°	1069.5	1067.1	1053.1	1056.6	1055.5
7.5°	1062.5	1057.8	1034.5	1032.1	1027.5
10°	1053.1	1041.5	1008.8	1000.7	993.7
12.5°	1040.3	1021.6	982.0	965.7	957.5
15°	1022.8	999.5	950.5	928.3	917.8
17.5°	1001.8	969.2	917.8	887.5	875.9
20°	977.3	938.8	879.4	844.4	830.4
22.5°	950.5	905.0	838.5	801.2	786.1
25°	919.0	868.9	797.7	756.9	737.1
27.5°	887.5	831.5	754.6	709.1	688.1
30°	856.0	791.9	707.9	658.9	636.8
32.5°	822.2	751.1	664.8	611.1	585.5
35°	782.6	710.3	618.1	562.1	534.1
37.5°	744.1	667.1	572.6	509.7	482.8
40°	707.9	626.3	527.2	458.3	430.4
42.5°	667.1	583.1	481.7	409.4	377.9
45°	626.3	538.8	435.0	356.9	325.4
47.5°	583.1	496.8	386.0	309.1	288.1
50°	544.6	453.7	342.9	272.9	258.9
52.5°	500.3	411.7	298.6	244.9	235.6
55°	456.0	366.2	255.4	220.4	213.4
57.5°	410.5	325.4	221.6	199.4	192.4
60°	362.7	283.4	194.8	177.3	173.8
62.5°	314.9	240.3	171.4	158.6	153.9
65°	268.2	199.4	150.4	138.8	136.5
67.5°	220.4	162.1	129.5	121.3	120.1
70°	176.1	131.8	109.6	105.0	102.6
72.5°	135.3	105.0	92.1	88.6	87.5
75°	95.6	84.0	75.8	73.5	72.3
77.5°	64.1	64.1	60.6	58.3	59.5
80°	44.3	46.7	45.5	45.5	45.5
82.5°	29.2	31.5	32.7	32.7	32.7
85°	16.3	18.7	19.8	19.8	21.0
87.5°	5.8	7.0	8.2	9.3	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)