

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: P1060315

Luminaire Tested: S124RDR-S1195D835-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060315
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2406-143-37)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDR-S1195D835-X4F0-XX-UDD-WVL-B
Description: DEFINE 4 BLACK REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

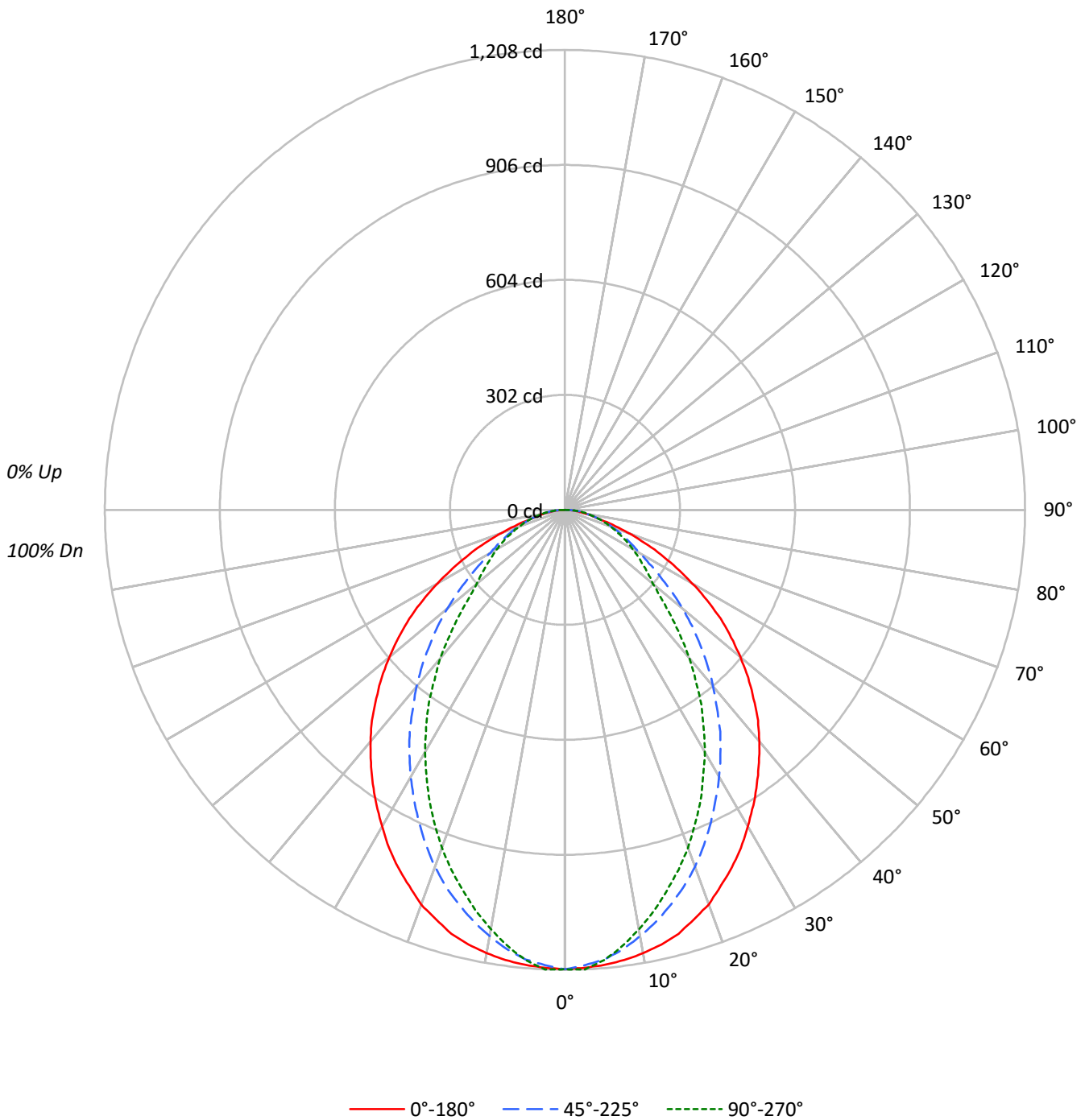
Lumens per Lamp: N/A
Luminaire Lumens: 2326.6 lumens
Efficiency: N/A
Efficacy: 55.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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	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	82	78	82	79	76	74
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64
4	86	75	67	61	84	74	67	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°	10390	10390	10390
5°	10369	10247	10259
10°	10340	9944	9782
15°	10276	9568	9228
20°	10109	9147	8653
25°	9848	8608	8002
30°	9545	8050	7303
35°	9241	7468	6559
40°	8925	6805	5722
45°	8529	6112	4784
50°	8054	5395	4046
55°	7493	4576	3746
60°	6643	3882	3541
65°	5662	3582	3352
70°	4426	3321	3177
75°	3018	3068	3068
80°	2603	2881	2956
85°	2243	2806	3083

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8529 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.3	4.8
10°-20°	304.9	13.1
20°-30°	423.3	18.2
30°-40°	453.7	19.5
40°-50°	401.9	17.3
50°-60°	302.9	13.0
60°-70°	196.1	8.4
70°-80°	100.7	4.3
80°-90°	30.9	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°	840.4	36.1
0°-40°	1294.1	55.6
0°-60°	1998.9	85.9
0°-90°	2326.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2326.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1207	1207	1207	1207	1207	
5°	1200	1201	1185	1187	1187	114
15°	1153	1127	1073	1046	1035	324
25°	1036	981	906	858	842	477
35°	879	800	710	647	624	550
45°	700	610	502	424	393	540
55°	499	415	305	257	250	443
65°	278	224	176	166	164	276
75°	91	95	92	92	92	107
85°	23	24	28	31	31	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1206.6	1206.6	1206.6	1206.6	1206.6
2.5°	1203.8	1208.0	1196.7	1205.2	1208.0
5°	1199.5	1201.0	1185.4	1186.8	1186.8
7.5°	1192.5	1189.6	1164.1	1157.0	1155.6
10°	1182.5	1174.0	1137.2	1123.0	1118.7
12.5°	1169.8	1154.2	1107.4	1087.5	1079.0
15°	1152.7	1127.2	1073.3	1046.4	1035.1
17.5°	1127.2	1094.6	1037.9	1003.9	991.1
20°	1103.1	1059.2	998.2	955.7	944.3
22.5°	1069.1	1022.3	952.8	907.5	893.3
25°	1036.5	981.2	906.0	857.8	842.2
27.5°	1001.0	938.6	857.8	806.8	786.9
30°	959.9	893.3	809.6	755.7	734.5
32.5°	920.2	849.3	760.0	700.4	677.8
35°	879.1	799.7	710.4	646.6	623.9
37.5°	836.6	752.9	655.1	592.7	562.9
40°	794.0	706.1	605.4	534.5	509.0
42.5°	750.1	657.9	554.4	480.7	448.1
45°	700.4	609.7	501.9	424.0	392.8
47.5°	652.2	562.9	453.7	368.7	340.3
50°	601.2	513.3	402.7	320.4	302.0
52.5°	550.1	462.2	353.1	283.6	275.1
55°	499.1	415.4	304.8	256.6	249.5
57.5°	442.4	367.2	262.3	232.5	226.9
60°	385.7	314.8	225.4	209.8	205.6
62.5°	330.4	269.4	199.9	187.2	184.3
65°	277.9	224.0	175.8	165.9	164.5
67.5°	226.9	184.3	153.1	147.5	144.6
70°	175.8	147.5	131.9	129.0	126.2
72.5°	130.4	119.1	112.0	110.6	109.2
75°	90.7	95.0	92.2	92.2	92.2
77.5°	72.3	73.7	75.1	76.6	75.1
80°	52.5	56.7	58.1	61.0	59.6
82.5°	36.9	39.7	44.0	45.4	46.8
85°	22.7	24.1	28.4	31.2	31.2
87.5°	9.9	11.3	14.2	17.0	18.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)