

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: P1060369

Luminaire Tested: S124RDR-S1195D940-X4F0-XX-UDD-WVL-B

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1060369
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-S1195D940-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

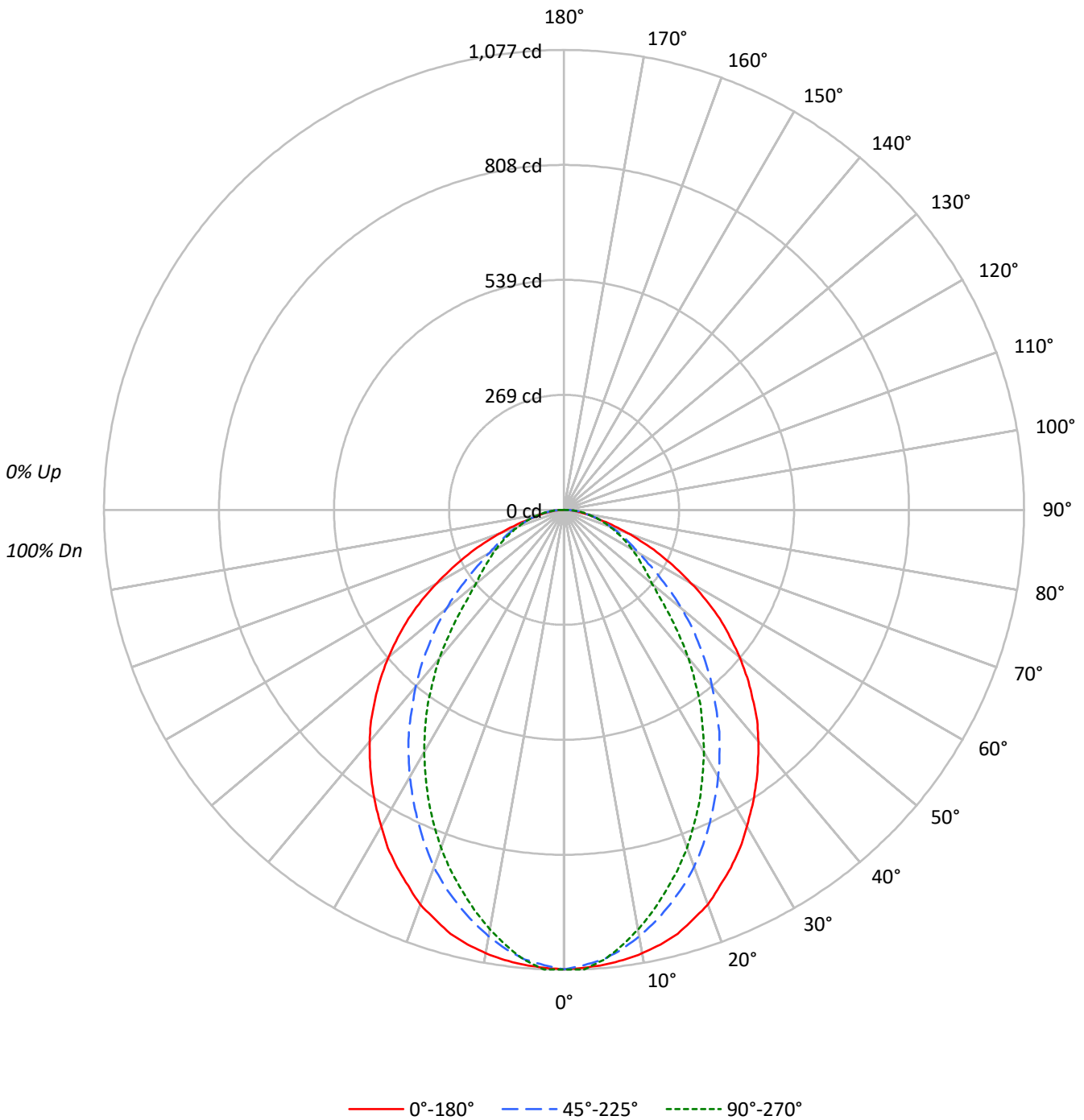
Lumens per Lamp: N/A
Luminaire Lumens: 2074.7 lumens
Efficiency: N/A
Efficacy: 49.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.96 / 1.12
Luminous Opening: Rectangular (W 0.31' x L: 4' x H: 0')
CIE Type: Direct

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										
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	107	104	100	97	99	97	94	96	93	91	92	90	88	86	86	86	86	86	86	86														
2	101	94	88	83	99	92	86	82	89	84	80	85	82	78	82	79	76	74	74	74	74	74	74	74														
3	93	84	76	71	91	82	75	70	79	74	69	77	72	68	74	70	66	64	64	64	64	64	64	64														
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56	56	56	56	56	56	56														
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50	50	50	50	50	50	50														
6	74	62	54	48	72	61	53	47	59	52	47	58	51	47	56	51	46	44	44	44	44	44	44	44														
7	69	57	48	43	68	56	48	43	54	47	42	53	47	42	52	46	42	40	40	40	40	40	40	40														
8	65	52	44	39	63	51	44	39	50	43	38	49	43	38	48	42	38	36	36	36	36	36	36	36														
9	61	48	40	35	59	48	40	35	46	40	35	45	39	35	44	39	35	33	33	33	33	33	33	33														
10	57	45	37	32	56	44	37	32	43	37	32	42	36	32	41	36	32	30	30	30	30	30	30	30														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9266	9266	9266
5°	9246	9137	9148
10°	9221	8866	8723
15°	9164	8532	8228
20°	9014	8157	7717
25°	8781	7676	7136
30°	8511	7178	6512
35°	8241	6658	5848
40°	7959	6069	5102
45°	7606	5451	4265
50°	7182	4811	3608
55°	6682	4081	3340
60°	5923	3462	3157
65°	5049	3195	2989
70°	3948	2961	2832
75°	2692	2735	2735
80°	2321	2569	2633
85°	1996	2500	2747

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7606 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.1	4.8
10°-20°	271.9	13.1
20°-30°	377.4	18.2
30°-40°	404.6	19.5
40°-50°	358.4	17.3
50°-60°	270.1	13.0
60°-70°	174.9	8.4
70°-80°	89.8	4.3
80°-90°	27.5	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°	749.4	36.1
0°-40°	1154.0	55.6
0°-60°	1782.5	85.9
0°-90°	2074.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2074.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1070	1071	1057	1058	1058	102
15°	1028	1005	957	933	923	289
25°	924	875	808	765	751	425
35°	784	713	633	576	556	490
45°	625	544	448	378	350	482
55°	445	370	272	229	222	395
65°	248	200	157	148	147	246
75°	81	85	82	82	82	96
85°	20	22	25	28	28	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1076.0	1076.0	1076.0	1076.0	1076.0
2.5°	1073.4	1077.2	1067.1	1074.7	1077.2
5°	1069.6	1070.9	1057.0	1058.3	1058.3
7.5°	1063.3	1060.8	1038.0	1031.7	1030.4
10°	1054.5	1046.9	1014.0	1001.4	997.6
12.5°	1043.1	1029.2	987.5	969.8	962.2
15°	1027.9	1005.2	957.1	933.1	923.0
17.5°	1005.2	976.1	925.5	895.2	883.8
20°	983.7	944.5	890.1	852.2	842.1
22.5°	953.3	911.6	849.6	809.2	796.5
25°	924.2	874.9	807.9	764.9	751.0
27.5°	892.6	837.0	764.9	719.4	701.7
30°	856.0	796.5	721.9	673.9	654.9
32.5°	820.6	757.3	677.7	624.6	604.4
35°	783.9	713.1	633.4	576.5	556.3
37.5°	746.0	671.4	584.1	528.5	501.9
40°	708.0	629.6	539.9	476.7	453.9
42.5°	668.8	586.7	494.4	428.6	399.5
45°	624.6	543.7	447.6	378.0	350.2
47.5°	581.6	501.9	404.6	328.7	303.4
50°	536.1	457.7	359.1	285.7	269.3
52.5°	490.6	412.2	314.8	252.9	245.3
55°	445.1	370.5	271.8	228.8	222.5
57.5°	394.5	327.5	233.9	207.4	202.3
60°	343.9	280.7	201.0	187.1	183.3
62.5°	294.6	240.2	178.3	166.9	164.4
65°	247.8	199.8	156.8	147.9	146.7
67.5°	202.3	164.4	136.6	131.5	129.0
70°	156.8	131.5	117.6	115.1	112.5
72.5°	116.3	106.2	99.9	98.6	97.4
75°	80.9	84.7	82.2	82.2	82.2
77.5°	64.5	65.7	67.0	68.3	67.0
80°	46.8	50.6	51.8	54.4	53.1
82.5°	32.9	35.4	39.2	40.5	41.7
85°	20.2	21.5	25.3	27.8	27.8
87.5°	8.9	10.1	12.6	15.2	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)