

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: P1059075

Luminaire Tested: S123RDR-S1000D940-X4F0-XX-UDD-WVL-W

Issue Date: 8/7/2025

Test Information

Test Method: LM-79-2019
Report Number: P1059075
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2406-143-64)
Test Lab: INNOVATION CENTER
Issue Date: 8/7/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S123RDR-S1000D940-X4F0-XX-UDD-WVL-W
Description: DEFINE 3 WHITE REGRESSED DIRECT RECESSED HOUSING WITH WHITE STRAIGHT BLADE LOUVER WITH DIFFUSER
CORE LIGHT ENGINE
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

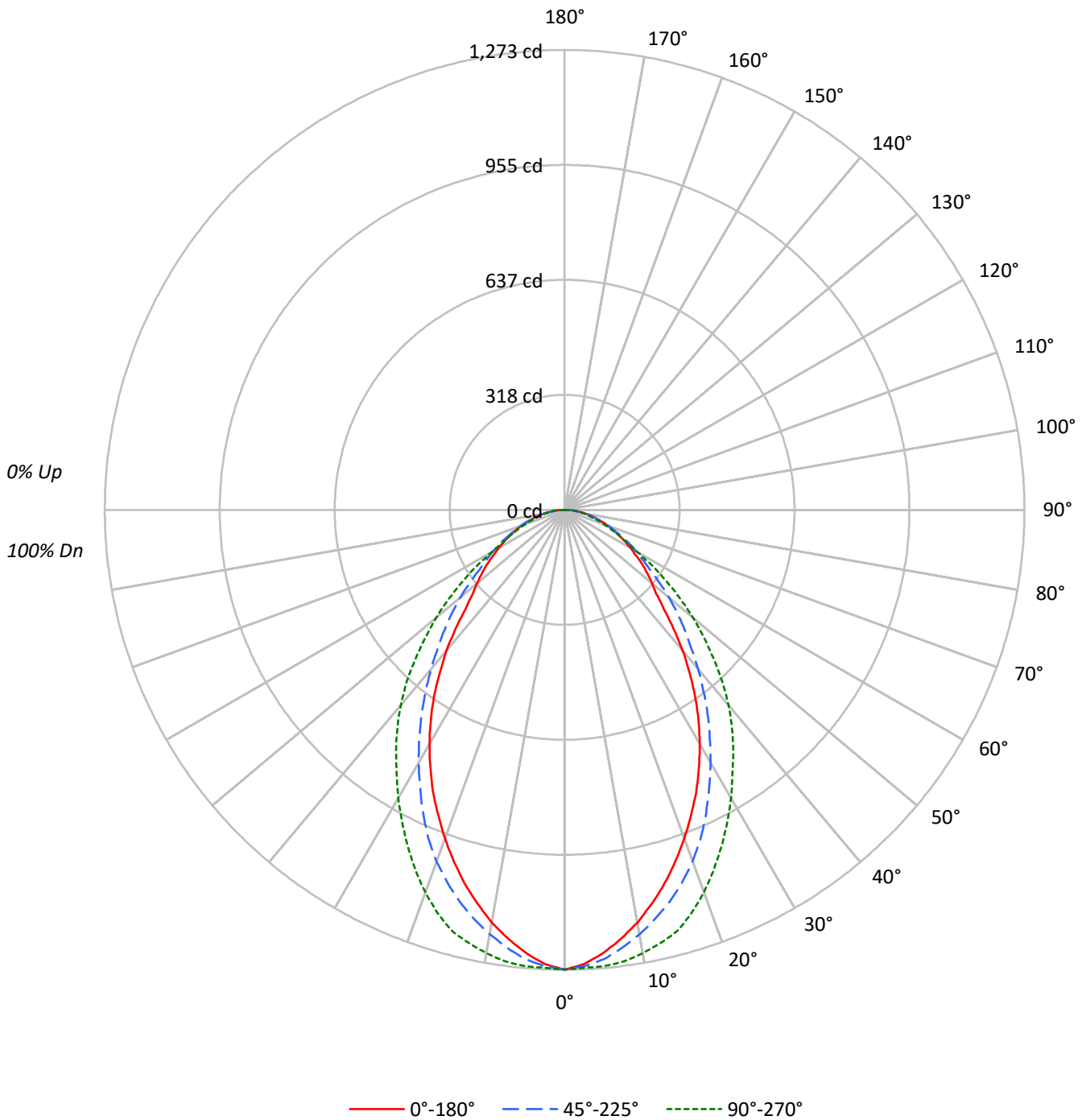
Lumens per Lamp: N/A
Luminaire Lumens: 2236.1 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.1 / 1.09
Luminous Opening: Rectangular (W 0.23' x L: 4' x H: 0')
CIE Type: Direct

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87				
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75				
3	94	85	77	72	92	83	76	71	80	75	70	78	73	69	75	71	68	66				
4	87	76	69	63	85	75	68	62	73	66	61	70	65	61	68	64	60	58				
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51				
6	75	63	55	49	73	62	55	49	61	54	49	59	53	48	57	52	48	46				
7	70	58	50	44	69	57	50	44	56	49	44	54	48	44	53	48	43	41				
8	66	53	46	40	64	53	45	40	51	45	40	50	44	40	49	44	39	38				
9	62	49	42	37	60	49	42	37	48	41	36	47	41	36	46	40	36	34				
10	58	46	39	34	57	45	38	34	45	38	34	44	38	33	43	37	33	32				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14943	14943	14943
5°	14510	14716	14949
10°	13829	14220	14860
15°	13008	13646	14672
20°	12097	12946	14082
25°	11167	12004	13310
30°	10142	10958	12488
35°	9027	9890	11664
40°	7790	8814	10811
45°	6438	7802	9693
50°	5782	6882	8464
55°	5358	5874	7018
60°	4939	5350	5376
65°	4596	4837	4504
70°	4322	4398	3948
75°	4074	3924	3480
80°	3848	3557	3259
85°	3692	3988	3692

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 9693 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.9	5.3
10°-20°	317.5	14.2
20°-30°	429.6	19.2
30°-40°	441.4	19.7
40°-50°	370.7	16.6
50°-60°	265.8	11.9
60°-70°	169.2	7.6
70°-80°	93.0	4.2
80°-90°	31.0	1.4
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°	865.0	38.7
0°-40°	1306.4	58.4
0°-60°	1942.9	86.9
0°-90°	2236.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2236.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1273	1273	1273	1273	1273	
5°	1231	1253	1248	1257	1268	115
15°	1070	1100	1122	1171	1207	300
25°	862	895	926	977	1027	395
35°	630	664	690	751	814	392
45°	388	422	470	538	584	306
55°	262	267	287	325	343	234
65°	165	175	174	164	162	165
75°	90	99	86	80	77	95
85°	27	28	30	31	27	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1272.6	1272.6	1272.6	1272.6	1272.6
2.5°	1258.3	1275.9	1263.8	1264.9	1268.2
5°	1231.0	1252.9	1248.5	1257.2	1268.2
7.5°	1197.0	1221.1	1222.2	1243.0	1260.5
10°	1159.8	1185.0	1192.6	1224.4	1246.3
12.5°	1116.0	1143.3	1159.8	1199.2	1227.7
15°	1070.0	1099.5	1122.5	1170.7	1206.9
17.5°	1019.6	1051.4	1080.9	1132.4	1169.6
20°	968.1	1002.1	1036.0	1084.2	1126.9
22.5°	914.5	949.5	984.5	1031.6	1078.7
25°	861.9	894.7	926.5	976.9	1027.3
27.5°	804.9	838.9	866.3	922.1	974.7
30°	748.0	781.9	808.2	866.3	921.0
32.5°	688.9	723.9	748.0	808.2	865.2
35°	629.7	663.7	689.9	751.3	813.7
37.5°	567.3	604.5	630.8	699.8	761.1
40°	508.2	543.2	575.0	647.2	705.3
42.5°	446.8	483.0	519.1	593.6	647.2
45°	387.7	421.6	469.8	537.7	583.7
47.5°	345.0	366.9	422.7	479.7	523.5
50°	316.5	325.3	376.7	427.1	463.3
52.5°	288.0	294.6	329.6	375.6	403.0
55°	261.7	267.2	286.9	325.3	342.8
57.5°	233.3	238.7	255.2	277.1	286.9
60°	210.3	214.7	227.8	231.1	228.9
62.5°	187.3	193.8	200.4	192.7	189.5
65°	165.4	175.2	174.1	164.3	162.1
67.5°	145.7	155.5	150.0	140.2	136.9
70°	125.9	135.8	128.1	118.3	115.0
72.5°	107.3	118.3	106.2	97.5	95.3
75°	89.8	98.6	86.5	79.9	76.7
77.5°	73.4	79.9	69.0	63.5	61.3
80°	56.9	61.3	52.6	49.3	48.2
82.5°	41.6	43.8	38.3	40.5	39.4
85°	27.4	28.5	29.6	30.7	27.4
87.5°	13.1	18.6	18.6	17.5	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)