

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: P1056400

Luminaire Tested: S125R3DR-S1270D930-X4F0-XX-UDD-F-B

Issue Date: 7/25/2025

Test Information

Test Method: LM-79-2024
Report Number: P1056400
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2503-402-11)
Test Lab: INNOVATION CENTER
Issue Date: 7/25/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125R3DR-S1270D930-X4F0-XX-UDD-F-B
Description: DEFINE 5, BLACK 3-INCH REGRESSED DIRECT RECESSED HOUSING WITH FROSTED LENS
CORE LIGHT ENGINE
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

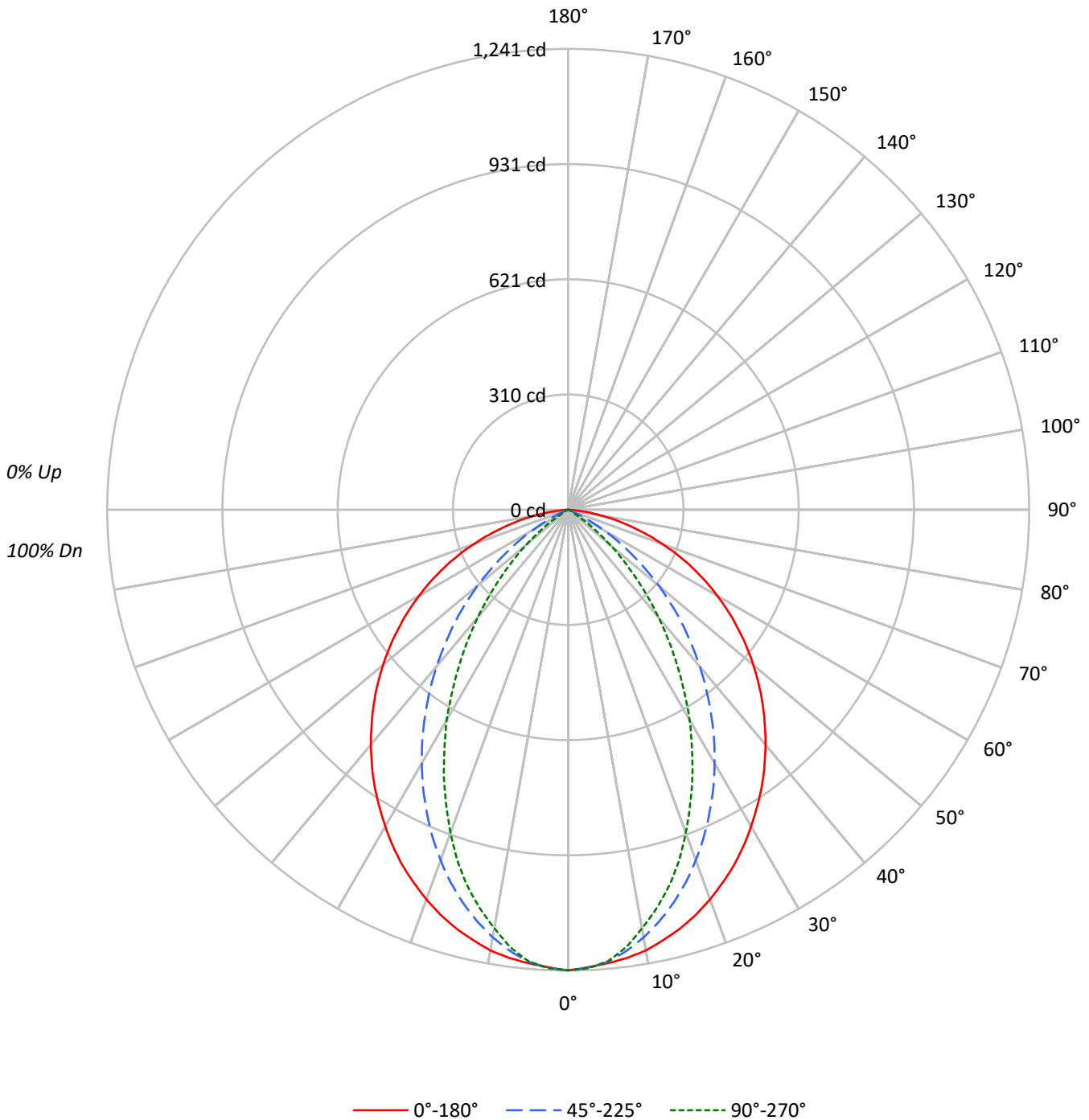
Lumens per Lamp: N/A
Luminaire Lumens: 2010.9 lumens
Efficiency: N/A
Efficacy: 48.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 0.89 / 1.07
Luminous Opening: Rectangular (W 0.39' x L: 3.9' x H: 0')
CIE Type: Direct

Input Watts (W): 41.9
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

TEST NUMBER: P1056400

CATALOG NUMBER: S125R3DR-S1270D930-X4F0-XX-UDD-F-B

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	111	108	104	101	109	106	103	100	101	99	97	98	96	94	94	93	91	89
2	103	97	91	87	101	95	90	86	92	88	84	89	85	82	86	83	80	78
3	96	87	81	75	94	86	80	75	83	78	74	80	76	72	78	74	71	69
4	89	79	72	66	87	78	71	66	76	70	65	73	68	64	71	67	63	61
5	83	72	64	59	81	71	64	58	69	63	58	67	62	57	65	61	57	55
6	77	66	58	53	76	65	58	52	63	57	52	62	56	52	60	55	51	49
7	72	61	53	47	71	60	52	47	58	52	47	57	51	47	56	50	46	45
8	68	56	48	43	66	55	48	43	54	47	43	53	47	43	52	46	42	41
9	64	52	44	39	62	51	44	39	50	44	39	49	43	39	48	43	39	37
10	60	48	41	36	59	48	41	36	47	40	36	46	40	36	45	40	36	34

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8771	8771	8771
5°	8699	8673	8665
10°	8650	8394	8218
15°	8540	8018	7676
20°	8399	7558	6966
25°	8239	7021	6177
30°	8040	6434	5339
35°	7842	5783	4414
40°	7625	5084	3495
45°	7400	4339	2532
50°	7154	3503	1636
55°	6880	2561	727
60°	6555	1582	209
65°	6149	575	124
70°	5566	203	52
75°	4837	68	33
80°	3705	49	0
85°	1695	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7400 cd/sqm



TEST NUMBER: P1056400

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.2	5.7
10°-20°	309.4	15.4
20°-30°	418.6	20.8
30°-40°	430.0	21.4
40°-50°	356.3	17.7
50°-60°	228.7	11.4
60°-70°	110.5	5.5
70°-80°	37.4	1.9
80°-90°	4.8	0.2
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°	843.3	41.9
0°-40°	1273.3	63.3
0°-60°	1858.3	92.4
0°-90°	2010.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2010.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1226	1236	1222	1215	1221	116
15°	1167	1152	1096	1058	1049	329
25°	1056	1005	900	819	792	486
35°	909	821	670	553	512	568
45°	740	618	434	300	253	571
55°	558	410	208	91	59	499
65°	368	203	34	10	7	364
75°	177	38	2	1	1	188
85°	21	0	0	0	0	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1240.7	1240.7	1240.7	1240.7	1240.7
2.5°	1233.3	1243.1	1234.5	1233.3	1235.7
5°	1225.9	1235.7	1222.2	1214.8	1221.0
7.5°	1217.3	1222.2	1198.9	1186.6	1189.0
10°	1205.0	1203.8	1169.3	1148.4	1144.8
12.5°	1186.6	1180.4	1134.9	1105.4	1099.3
15°	1166.9	1152.1	1095.6	1057.5	1048.8
17.5°	1143.5	1120.2	1052.5	1003.4	991.1
20°	1116.5	1084.5	1004.6	944.3	925.9
22.5°	1087.0	1046.4	954.2	882.9	858.3
25°	1056.2	1004.6	900.1	818.9	791.9
27.5°	1021.8	961.5	846.0	753.7	720.5
30°	984.9	916.0	788.2	687.3	654.1
32.5°	946.8	870.6	730.4	620.9	580.4
35°	908.7	821.4	670.1	553.3	511.5
37.5°	868.1	772.2	611.1	489.4	443.9
40°	826.3	721.8	550.9	423.0	378.7
42.5°	783.3	670.1	490.6	360.3	314.8
45°	740.2	618.5	434.0	300.0	253.3
47.5°	696.0	565.6	375.0	241.0	200.4
50°	650.5	514.0	318.5	188.1	148.8
52.5°	605.0	461.1	260.7	136.5	100.8
55°	558.2	409.5	207.8	91.0	59.0
57.5°	511.5	356.6	158.6	50.4	22.1
60°	463.6	306.2	111.9	17.2	14.8
62.5°	416.8	252.1	70.1	13.5	11.1
65°	367.6	202.9	34.4	9.8	7.4
67.5°	319.7	156.2	14.8	6.1	3.7
70°	269.3	113.1	9.8	3.7	2.5
72.5°	222.6	72.5	6.1	2.5	1.2
75°	177.1	38.1	2.5	1.2	1.2
77.5°	132.8	16.0	1.2	1.2	1.2
80°	91.0	7.4	1.2	1.2	0.0
82.5°	54.1	2.5	1.2	1.2	0.0
85°	20.9	0.0	0.0	0.0	0.0
87.5°	1.2	0.0	0.0	0.0	0.0
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	18.61	20.00	18.98	20.31	20.63	3.47	4.86	3.84	5.17	5.49
	3H	20.16	21.39	20.54	21.72	22.08	3.40	4.62	3.78	4.95	5.32
	4H	20.69	21.83	21.09	22.18	22.56	3.33	4.47	3.73	4.83	5.21
	6H	21.02	22.08	21.44	22.45	22.84	3.26	4.31	3.67	4.68	5.07
	8H	21.11	22.10	21.54	22.49	22.90	3.22	4.22	3.65	4.61	5.01
	12H	21.12	22.08	21.56	22.46	22.89	3.18	4.13	3.61	4.51	4.94
4H	2H	18.42	19.56	18.82	19.91	20.29	4.34	5.48	4.74	5.83	6.21
	3H	20.03	20.96	20.44	21.37	21.77	4.29	5.22	4.70	5.62	6.03
	4H	20.55	21.39	20.99	21.80	22.25	4.21	5.04	4.64	5.46	5.90
	6H	20.93	21.65	21.39	22.09	22.56	4.14	4.86	4.61	5.31	5.77
	8H	21.03	21.70	21.49	22.14	22.61	4.09	4.76	4.56	5.21	5.68
	12H	21.06	21.66	21.55	22.14	22.61	4.05	4.64	4.54	5.13	5.60
8H	4H	20.42	21.10	20.89	21.54	22.01	5.23	5.90	5.70	6.35	6.82
	6H	20.78	21.33	21.28	21.82	22.30	5.15	5.70	5.65	6.19	6.67
	8H	20.88	21.37	21.40	21.88	22.37	5.09	5.59	5.61	6.10	6.59
	12H	20.92	21.35	21.43	21.85	22.42	5.05	5.49	5.57	5.98	6.55
12H	4H	20.38	20.98	20.87	21.46	21.93	5.31	5.90	5.79	6.39	6.86
	6H	20.72	21.21	21.24	21.73	22.22	5.21	5.70	5.73	6.22	6.71
	8H	20.83	21.27	21.35	21.76	22.33	5.18	5.61	5.69	6.11	6.68