

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: P242793

Luminaire Tested: S125DRP-S1090D935-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242793
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S1090D935-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

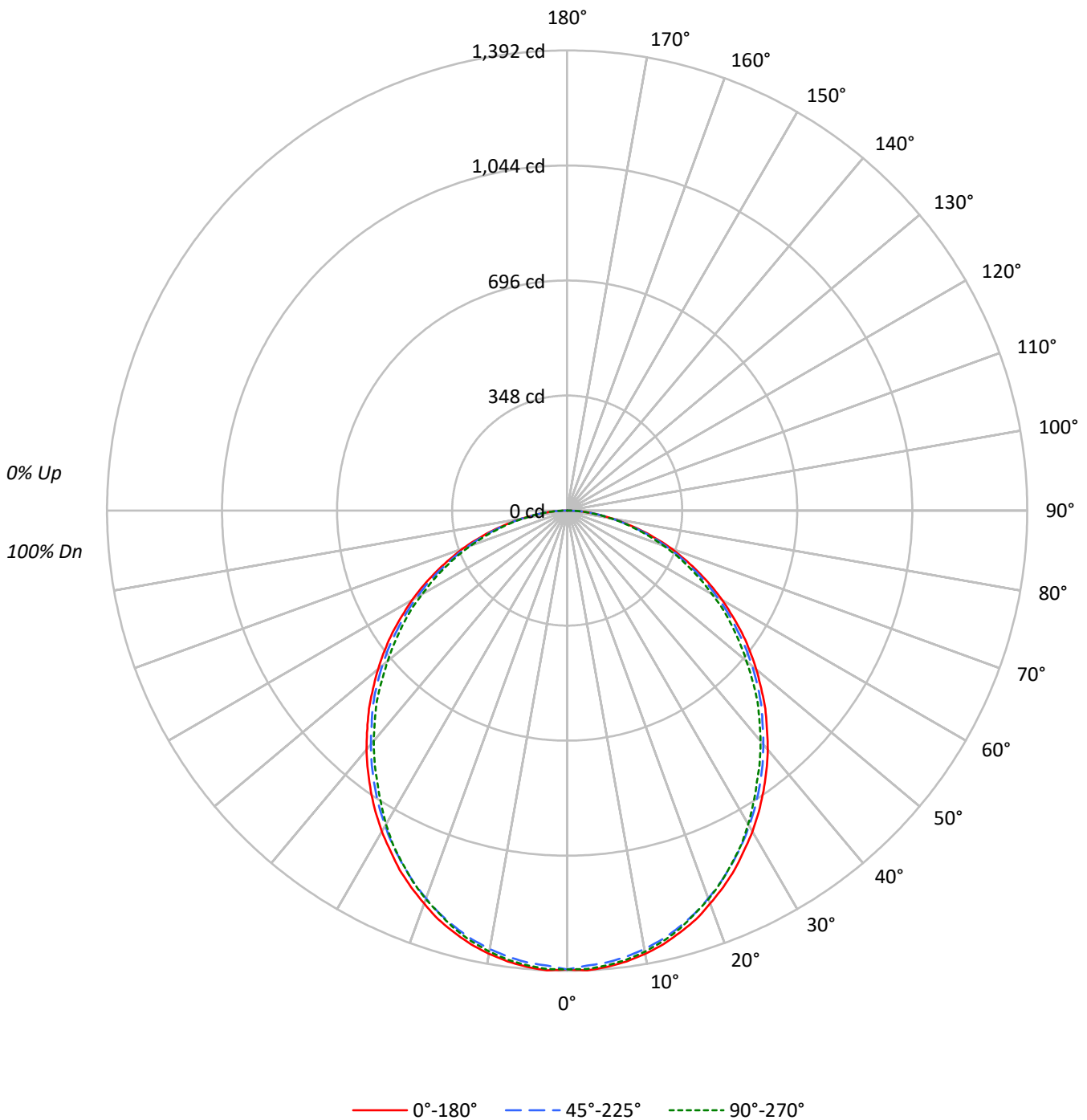
Lumens per Lamp: N/A
Luminaire Lumens: 3612.2 lumens
Efficiency: N/A
Efficacy: 103.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 34.8
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	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9864	9864	9864
5°	9886	9792	9855
10°	9826	9723	9778
15°	9719	9606	9646
20°	9567	9442	9459
25°	9403	9247	9239
30°	9200	9038	8993
35°	8984	8812	8689
40°	8761	8567	8445
45°	8519	8344	8178
50°	8255	8074	7831
55°	8000	7769	7551
60°	7694	7460	7195
65°	7331	7090	6851
70°	6982	6662	6434
75°	6363	6151	5940
80°	5661	5575	5440
85°	4925	5015	4746

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 8519 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.0	3.6
10°-20°	369.9	10.2
20°-30°	546.1	15.1
30°-40°	637.2	17.6
40°-50°	639.9	17.7
50°-60°	561.8	15.6
60°-70°	418.4	11.6
70°-80°	239.0	6.6
80°-90°	69.0	1.9
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°	1047.0	29.0
0°-40°	1684.2	46.6
0°-60°	2885.9	79.9
0°-90°	3612.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3612.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1388	1388	1388	1388	1388	
5°	1386	1384	1372	1382	1381	131
15°	1321	1318	1306	1311	1311	372
25°	1199	1194	1179	1181	1178	552
35°	1035	1031	1016	1010	1001	648
45°	848	843	830	817	814	653
55°	646	642	627	617	609	576
65°	436	434	422	412	407	432
75°	232	230	224	221	216	247
85°	60	62	62	60	58	70
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1387.9	1387.9	1387.9	1387.9	1387.9
2.5°	1392.2	1389.0	1378.0	1389.0	1387.9
5°	1385.7	1383.5	1372.5	1382.4	1381.3
7.5°	1375.8	1373.6	1361.5	1371.4	1370.3
10°	1361.5	1359.3	1347.2	1356.0	1354.9
12.5°	1343.9	1339.5	1328.6	1335.2	1335.2
15°	1320.9	1317.6	1305.5	1311.0	1311.0
17.5°	1296.7	1291.2	1279.2	1285.7	1280.3
20°	1264.9	1262.7	1248.4	1256.1	1250.6
22.5°	1233.0	1228.6	1215.5	1219.9	1216.6
25°	1199.0	1193.5	1179.2	1181.4	1178.1
27.5°	1159.5	1156.2	1141.9	1143.0	1139.7
30°	1121.0	1117.8	1101.3	1099.1	1095.8
32.5°	1079.3	1073.8	1059.6	1055.2	1048.6
35°	1035.4	1031.0	1015.6	1010.1	1001.4
37.5°	990.4	984.9	970.6	962.9	957.4
40°	944.3	938.8	923.4	913.5	910.2
42.5°	894.9	890.5	875.1	866.3	860.8
45°	847.6	843.3	830.1	816.9	813.6
47.5°	796.0	797.1	780.7	767.5	759.8
50°	746.6	743.3	730.2	715.9	708.2
52.5°	696.1	693.9	679.7	667.6	658.8
55°	645.6	642.3	627.0	617.1	609.4
57.5°	591.8	590.7	577.5	564.4	561.1
60°	541.3	536.9	524.8	513.9	506.2
62.5°	488.6	485.3	475.4	463.4	457.9
65°	435.9	433.7	421.6	411.7	407.4
67.5°	384.3	379.9	371.1	362.3	360.1
70°	336.0	330.5	320.6	314.0	309.6
72.5°	283.3	280.0	274.5	266.8	262.4
75°	231.7	229.5	224.0	220.7	216.3
77.5°	183.4	182.3	179.0	176.8	173.5
80°	138.3	138.3	136.2	135.1	132.9
82.5°	98.8	96.6	96.6	94.4	94.4
85°	60.4	61.5	61.5	60.4	58.2
87.5°	29.6	29.6	28.5	28.5	26.4
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	19.30	20.92	19.67	21.23	21.55	18.97	20.59	19.34	20.91	21.22
	3H	21.07	22.53	21.45	22.86	23.22	20.71	22.17	21.08	22.50	22.86
	4H	21.73	23.11	22.13	23.45	23.83	21.35	22.73	21.75	23.08	23.45
	6H	22.20	23.48	22.62	23.85	24.24	21.84	23.12	22.25	23.48	23.87
	8H	22.36	23.58	22.79	23.97	24.37	22.00	23.22	22.42	23.61	24.01
	12H	22.47	23.64	22.90	24.02	24.45	22.11	23.28	22.54	23.66	24.09
4H	2H	19.88	21.26	20.28	21.60	21.98	19.62	21.00	20.02	21.35	21.72
	3H	21.88	23.03	22.28	23.43	23.83	21.57	22.73	21.98	23.12	23.52
	4H	22.66	23.71	23.09	24.12	24.56	22.35	23.39	22.78	23.80	24.24
	6H	23.27	24.18	23.72	24.62	25.08	22.96	23.87	23.42	24.32	24.77
	8H	23.47	24.33	23.94	24.77	25.24	23.17	24.03	23.63	24.47	24.93
	12H	23.63	24.40	24.11	24.87	25.34	23.33	24.09	23.81	24.57	25.04
8H	4H	22.95	23.80	23.41	24.25	24.71	22.67	23.52	23.13	23.97	24.43
	6H	23.68	24.39	24.17	24.88	25.35	23.41	24.12	23.90	24.61	25.08
	8H	23.96	24.59	24.47	25.10	25.59	23.69	24.33	24.20	24.84	25.32
	12H	24.19	24.75	24.69	25.24	25.80	23.93	24.49	24.43	24.98	25.54
12H	4H	22.98	23.75	23.46	24.22	24.69	22.71	23.47	23.19	23.95	24.42
	6H	23.73	24.37	24.24	24.88	25.36	23.47	24.11	23.98	24.62	25.10
	8H	24.07	24.63	24.57	25.12	25.68	23.81	24.38	24.32	24.87	25.43