

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: P243629

Luminaire Tested: S125DRP-H1090D927-X4F0-XX-UDD-F-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243629
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-51)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H1090D927-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

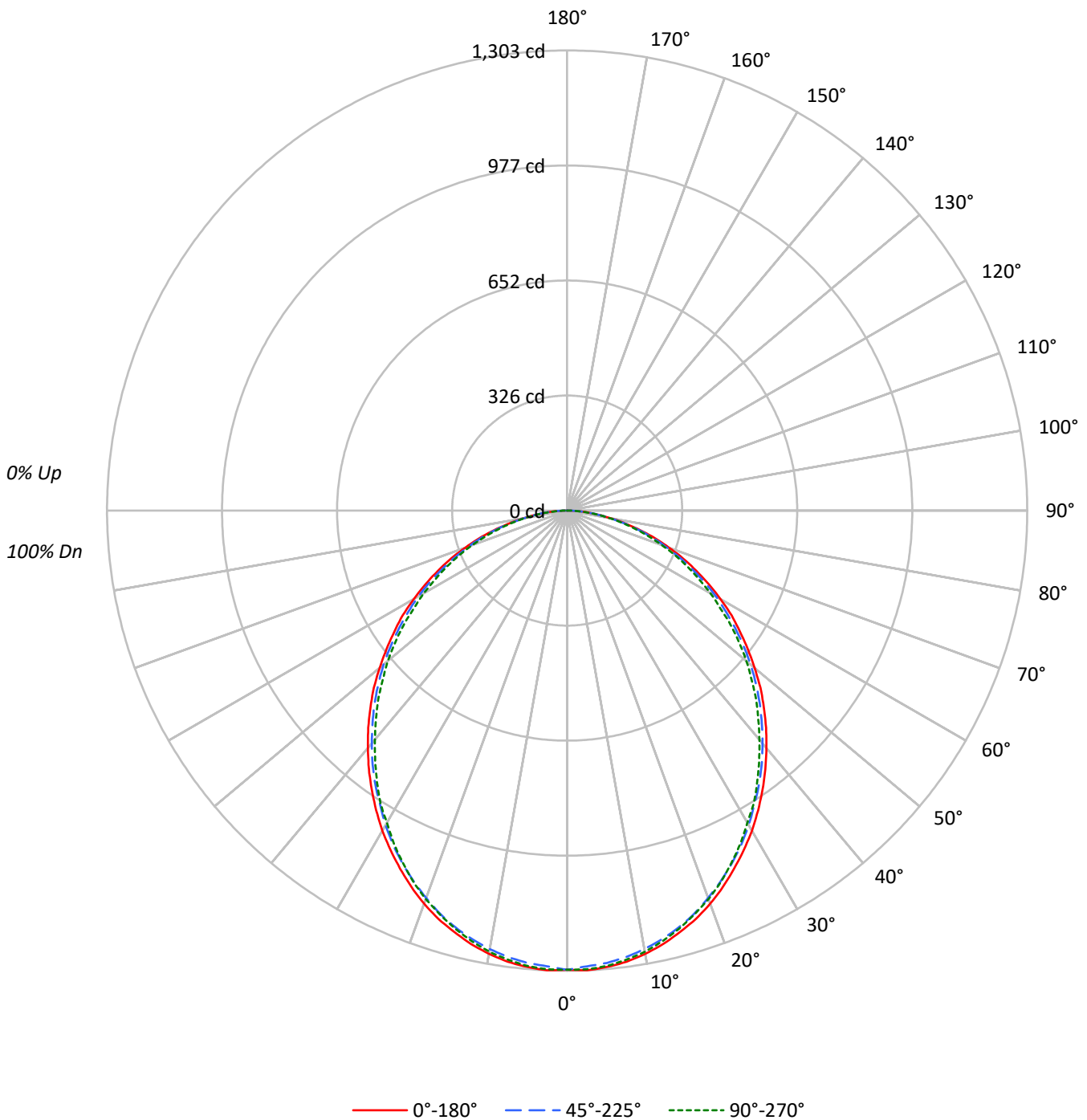
Lumens per Lamp: N/A
Luminaire Lumens: 3356.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

Input Watts (W): 31.5
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	95	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	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	77	64	55	48	74	63	54	48	61	53	48	59	52	47	57	51	47	44
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	44	38	64	51	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9240	9240	9240
5°	9256	9174	9235
10°	9197	9101	9155
15°	9089	8991	9019
20°	8960	8830	8852
25°	8775	8647	8633
30°	8588	8439	8376
35°	8368	8218	8144
40°	8142	7983	7858
45°	7919	7747	7603
50°	7657	7499	7330
55°	7399	7198	7009
60°	7119	6915	6671
65°	6786	6545	6320
70°	6363	6124	5927
75°	5868	5684	5423
80°	5116	5075	4957
85°	4436	4436	4200

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7919 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.6	3.7
10°-20°	346.1	10.3
20°-30°	510.2	15.2
30°-40°	594.2	17.7
40°-50°	595.4	17.7
50°-60°	520.5	15.5
60°-70°	386.3	11.5
70°-80°	219.1	6.5
80°-90°	61.4	1.8
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°	979.0	29.2
0°-40°	1573.2	46.9
0°-60°	2689.2	80.1
0°-90°	3356.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3356.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1300	1300	1300	1300	1300	
5°	1297	1295	1286	1295	1294	123
15°	1235	1233	1222	1229	1226	348
25°	1119	1115	1103	1106	1101	516
35°	964	959	947	942	939	603
45°	788	786	771	759	756	608
55°	597	596	581	568	566	535
65°	404	401	389	381	376	400
75°	214	210	207	203	198	226
85°	54	54	54	52	52	63
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1300.1	1300.1	1300.1	1300.1	1300.1
2.5°	1303.0	1301.1	1291.5	1301.1	1300.1
5°	1297.3	1295.4	1285.8	1295.4	1294.4
7.5°	1288.7	1285.8	1275.3	1284.9	1283.0
10°	1274.4	1272.5	1261.0	1268.6	1268.6
12.5°	1257.2	1254.3	1242.9	1249.6	1248.6
15°	1235.3	1233.4	1221.9	1228.6	1225.7
17.5°	1212.4	1207.6	1197.1	1202.8	1199.0
20°	1184.7	1180.9	1167.5	1172.3	1170.4
22.5°	1153.2	1148.5	1136.1	1138.9	1138.0
25°	1118.9	1115.1	1102.7	1105.5	1100.8
27.5°	1083.6	1078.8	1067.4	1067.4	1062.6
30°	1046.4	1041.6	1028.3	1028.3	1020.6
32.5°	1006.3	1002.5	986.3	985.3	983.4
35°	964.4	958.6	947.2	941.5	938.6
37.5°	922.4	917.6	905.2	897.6	892.8
40°	877.6	874.7	860.4	853.7	847.0
42.5°	833.7	830.8	815.6	804.1	801.2
45°	787.9	786.0	770.7	759.3	756.4
47.5°	742.1	740.2	724.9	712.5	707.8
50°	692.5	692.5	678.2	665.8	662.9
52.5°	644.8	643.9	629.6	617.2	614.3
55°	597.1	596.2	580.9	568.5	565.6
57.5°	552.3	546.6	533.2	523.7	514.1
60°	500.8	497.9	486.5	474.1	469.3
62.5°	453.1	449.3	437.8	427.3	420.7
65°	403.5	400.6	389.2	380.6	375.8
67.5°	356.7	352.9	341.5	334.8	331.0
70°	306.2	303.3	294.7	286.2	285.2
72.5°	261.4	257.5	252.8	245.1	241.3
75°	213.7	209.9	207.0	203.2	197.5
77.5°	167.9	166.0	164.1	161.2	158.3
80°	125.0	125.0	124.0	122.1	121.1
82.5°	88.7	89.7	86.8	84.9	84.9
85°	54.4	54.4	54.4	52.5	51.5
87.5°	26.7	23.8	23.8	21.9	21.9
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	19.03	20.65	19.40	20.96	21.28	18.70	20.31	19.06	20.63	20.94
	3H	20.79	22.25	21.17	22.58	22.94	20.41	21.87	20.79	22.20	22.56
	4H	21.44	22.81	21.84	23.16	23.54	21.05	22.42	21.45	22.77	23.15
	6H	21.90	23.18	22.31	23.54	23.93	21.52	22.80	21.93	23.16	23.55
	8H	22.05	23.27	22.48	23.66	24.06	21.68	22.89	22.10	23.28	23.68
	12H	22.15	23.32	22.58	23.70	24.13	21.78	22.94	22.21	23.32	23.75
4H	2H	19.61	20.98	20.00	21.33	21.70	19.34	20.71	19.74	21.06	21.44
	3H	21.59	22.74	22.00	23.14	23.54	21.27	22.42	21.68	22.82	23.22
	4H	22.36	23.40	22.80	23.82	24.25	22.04	23.08	22.47	23.49	23.93
	6H	22.95	23.86	23.41	24.30	24.76	22.64	23.55	23.09	23.99	24.44
	8H	23.15	24.00	23.61	24.44	24.91	22.84	23.69	23.30	24.13	24.60
	12H	23.30	24.06	23.78	24.54	25.01	22.98	23.75	23.46	24.22	24.69
8H	4H	22.65	23.50	23.11	23.94	24.40	22.36	23.21	22.82	23.65	24.12
	6H	23.36	24.06	23.85	24.55	25.03	23.08	23.79	23.57	24.27	24.75
	8H	23.63	24.26	24.14	24.77	25.25	23.35	23.98	23.86	24.49	24.98
	12H	23.85	24.41	24.36	24.90	25.46	23.57	24.13	24.07	24.62	25.18
12H	4H	22.67	23.44	23.15	23.91	24.38	22.39	23.16	22.87	23.63	24.10
	6H	23.40	24.04	23.91	24.55	25.03	23.14	23.77	23.65	24.28	24.77
	8H	23.73	24.30	24.24	24.79	25.35	23.47	24.03	23.97	24.52	25.08