

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: P243718

Luminaire Tested: S125DRP-H1270D930-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243718
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-56)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-H1270D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3000K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

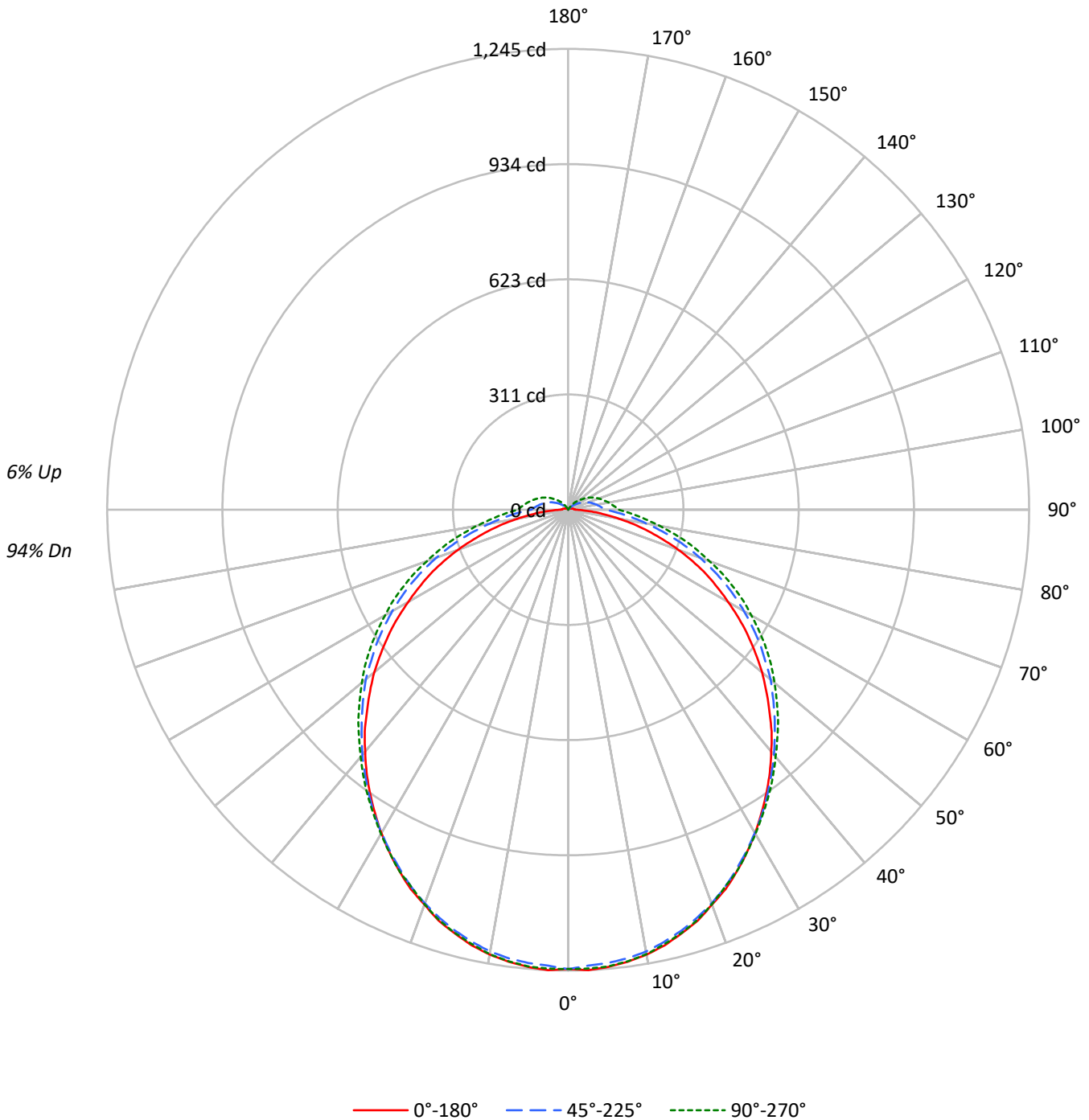
Lumens per Lamp: N/A
Luminaire Lumens: 3852.8 lumens
Efficiency: N/A
Efficacy: 102.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 37.7
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

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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	118	118	118	118	114	114	114	114	108	108	108	102	102	102	96	96	96	94
1	106	101	96	92	103	98	94	90	93	89	86	88	85	82	83	81	79	76
2	96	88	80	74	93	85	78	73	81	75	70	76	72	68	72	69	65	63
3	88	77	68	61	84	75	67	60	71	64	59	67	61	57	64	59	55	53
4	80	68	59	52	77	66	58	51	63	55	50	60	53	48	57	51	47	45
5	74	60	51	44	71	59	50	44	56	49	43	53	47	42	51	45	41	39
6	68	54	45	39	66	53	45	38	51	43	38	48	42	37	46	40	36	34
7	63	49	40	34	61	48	40	34	46	39	33	44	37	33	42	36	32	30
8	59	45	36	30	57	44	36	30	42	35	30	40	34	29	39	33	29	27
9	55	41	33	27	53	40	33	27	39	32	27	37	31	26	36	30	26	24
10	51	38	30	25	50	37	30	25	36	29	24	35	28	24	33	28	23	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8820	8820	8820
5°	8828	8646	8675
10°	8773	8500	8479
15°	8667	8297	8238
20°	8520	8073	7961
25°	8370	7813	7689
30°	8181	7549	7391
35°	7979	7292	7125
40°	7776	7042	6859
45°	7561	6792	6641
50°	7369	6585	6411
55°	7128	6330	6198
60°	6837	6053	5929
65°	6601	5761	5664
70°	6210	5401	5320
75°	5684	4979	5016
80°	5063	4523	4632
85°	4504	4228	4408

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 7561 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.4	3.0
10°-20°	333.6	8.7
20°-30°	496.6	12.9
30°-40°	588.3	15.3
40°-50°	608.7	15.8
50°-60°	561.4	14.6
60°-70°	453.7	11.8
70°-80°	303.2	7.9
80°-90°	156.4	4.1
90°-100°	87.7	2.3
100°-110°	65.1	1.7
110°-120°	43.3	1.1
120°-130°	24.2	0.6
130°-140°	10.9	0.3
140°-150°	2.3	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	947.6	24.6
0°-40°	1535.9	39.9
0°-60°	2706.0	70.2
0°-90°	3619.3	93.9
90°-120°	196.1	5.1
90°-150°	233.5	6.1
90°-180°	234.0	6.1
0°-180°	3852.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1241	1241	1241	1241	1241	
5°	1240	1239	1229	1239	1239	118
15°	1185	1188	1178	1185	1184	334
25°	1078	1083	1073	1079	1078	496
35°	934	940	938	943	944	584
45°	768	781	788	800	802	594
55°	593	611	632	647	652	530
65°	411	435	464	485	491	405
75°	224	257	294	319	328	238
85°	69	108	150	177	186	71
90°	20	57	100	127	136	14
95°	16	48	88	115	123	13
105°	12	31	68	92	100	12
115°	8	16	47	69	77	8
125°	5	5	28	45	53	4
135°	2	2	10	26	31	2
145°	1	0	0	7	10	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1240.9	1240.9	1240.9	1240.9	1240.9
2.5°	1245.4	1242.0	1232.8	1242.0	1240.9
5°	1239.7	1238.6	1229.4	1238.6	1238.6
7.5°	1231.7	1230.5	1222.5	1231.7	1230.5
10°	1220.2	1220.2	1212.2	1219.1	1219.1
12.5°	1205.3	1205.3	1196.1	1204.2	1201.9
15°	1184.7	1188.1	1177.8	1184.7	1183.5
17.5°	1164.0	1164.0	1156.0	1161.7	1161.7
20°	1135.3	1139.9	1131.9	1137.6	1134.2
22.5°	1110.1	1112.4	1104.4	1110.1	1104.4
25°	1078.0	1082.6	1073.4	1079.2	1078.0
27.5°	1044.7	1048.2	1041.3	1048.2	1044.7
30°	1009.2	1012.6	1008.0	1012.6	1011.5
32.5°	971.4	978.2	974.8	978.2	977.1
35°	933.5	940.4	938.1	942.7	943.8
37.5°	894.5	901.4	901.4	907.1	908.3
40°	853.2	862.4	864.7	872.7	871.6
42.5°	813.1	822.3	825.7	836.0	836.0
45°	768.4	781.0	787.9	800.5	801.6
47.5°	725.9	739.7	750.0	761.5	763.8
50°	683.5	696.1	713.3	724.8	727.1
52.5°	637.6	653.7	670.9	686.9	691.5
55°	592.9	611.3	631.9	646.8	652.5
57.5°	547.0	566.5	589.5	607.8	612.4
60°	498.9	521.8	548.2	566.5	571.1
62.5°	454.1	479.4	506.9	526.4	533.3
65°	410.6	434.6	464.5	485.1	490.8
67.5°	363.5	389.9	420.9	443.8	449.6
70°	316.5	345.2	378.4	400.2	406.0
72.5°	268.4	300.5	336.0	360.1	367.0
75°	223.6	256.9	293.6	318.8	328.0
77.5°	181.2	215.6	252.3	278.7	286.7
80°	138.8	174.3	214.5	242.0	250.0
82.5°	100.9	138.8	180.0	207.6	215.6
85°	68.8	107.8	150.2	176.6	185.8
87.5°	42.4	80.3	123.9	150.2	159.4
90°	19.5	57.3	99.8	127.3	136.5
92.5°	17.2	52.8	94.0	121.6	129.6
95°	16.1	48.2	88.3	114.7	122.7
97.5°	14.9	43.6	82.6	108.9	117.0
100°	13.8	39.0	78.0	103.2	111.2
102.5°	12.6	35.6	72.2	97.5	104.4
105°	11.5	31.0	67.7	91.7	99.8
107.5°	10.3	26.4	63.1	86.0	94.0
110°	9.2	22.9	57.3	80.3	88.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	8.0	19.5	52.8	74.5	82.6
115°	8.0	16.1	47.0	68.8	76.8
117.5°	6.9	12.6	41.3	63.1	71.1
120°	5.7	9.2	36.7	57.3	65.4
122.5°	5.7	6.9	32.1	51.6	59.6
125°	4.6	4.6	27.5	44.7	52.8
127.5°	4.6	3.4	22.9	40.1	45.9
130°	3.4	2.3	19.5	35.6	41.3
132.5°	3.4	2.3	14.9	31.0	36.7
135°	2.3	2.3	10.3	26.4	31.0
137.5°	2.3	1.1	6.9	20.6	26.4
140°	1.1	1.1	2.3	16.1	20.6
142.5°	1.1	1.1	1.1	11.5	16.1
145°	1.1	0.0	0.0	6.9	10.3
147.5°	1.1	0.0	0.0	2.3	5.7
150°	0.0	0.0	0.0	0.0	1.1
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	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	17.48	19.01	17.93	19.45	19.91	18.57	20.10	19.02	20.54	21.00
	3H	19.13	20.52	19.60	20.97	21.47	20.73	22.13	21.20	22.57	23.08
	4H	19.70	21.02	20.19	21.48	22.00	21.69	23.01	22.18	23.48	24.00
	6H	20.08	21.31	20.59	21.79	22.32	22.60	23.82	23.10	24.30	24.84
	8H	20.19	21.36	20.70	21.87	22.41	23.03	24.20	23.54	24.70	25.24
	12H	20.25	21.38	20.77	21.88	22.45	23.48	24.60	24.00	25.10	25.67
4H	2H	18.24	19.56	18.73	20.03	20.55	19.09	20.41	19.59	20.88	21.40
	3H	20.12	21.24	20.63	21.75	22.29	21.48	22.59	21.98	23.10	23.65
	4H	20.83	21.85	21.35	22.37	22.94	22.59	23.61	23.11	24.13	24.70
	6H	21.34	22.24	21.88	22.79	23.38	23.66	24.55	24.20	25.10	25.69
	8H	21.49	22.34	22.04	22.88	23.49	24.17	25.01	24.72	25.56	26.16
	12H	21.60	22.36	22.17	22.94	23.54	24.72	25.48	25.29	26.06	26.67
8H	4H	21.31	22.15	21.86	22.70	23.30	22.84	23.69	23.39	24.23	24.84
	6H	21.98	22.69	22.56	23.28	23.89	24.07	24.78	24.65	25.37	25.98
	8H	22.22	22.86	22.81	23.46	24.08	24.70	25.34	25.30	25.94	26.56
	12H	22.40	22.97	23.00	23.56	24.25	25.41	25.98	26.01	26.57	27.26
12H	4H	21.41	22.17	21.98	22.75	23.35	22.86	23.62	23.43	24.20	24.81
	6H	22.14	22.78	22.73	23.38	24.00	24.11	24.75	24.71	25.36	25.98
	8H	22.46	23.03	23.05	23.62	24.30	24.82	25.39	25.41	25.98	26.66