

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: P243714

Luminaire Tested: S125DRP-H375D930-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243714
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-H375D930-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

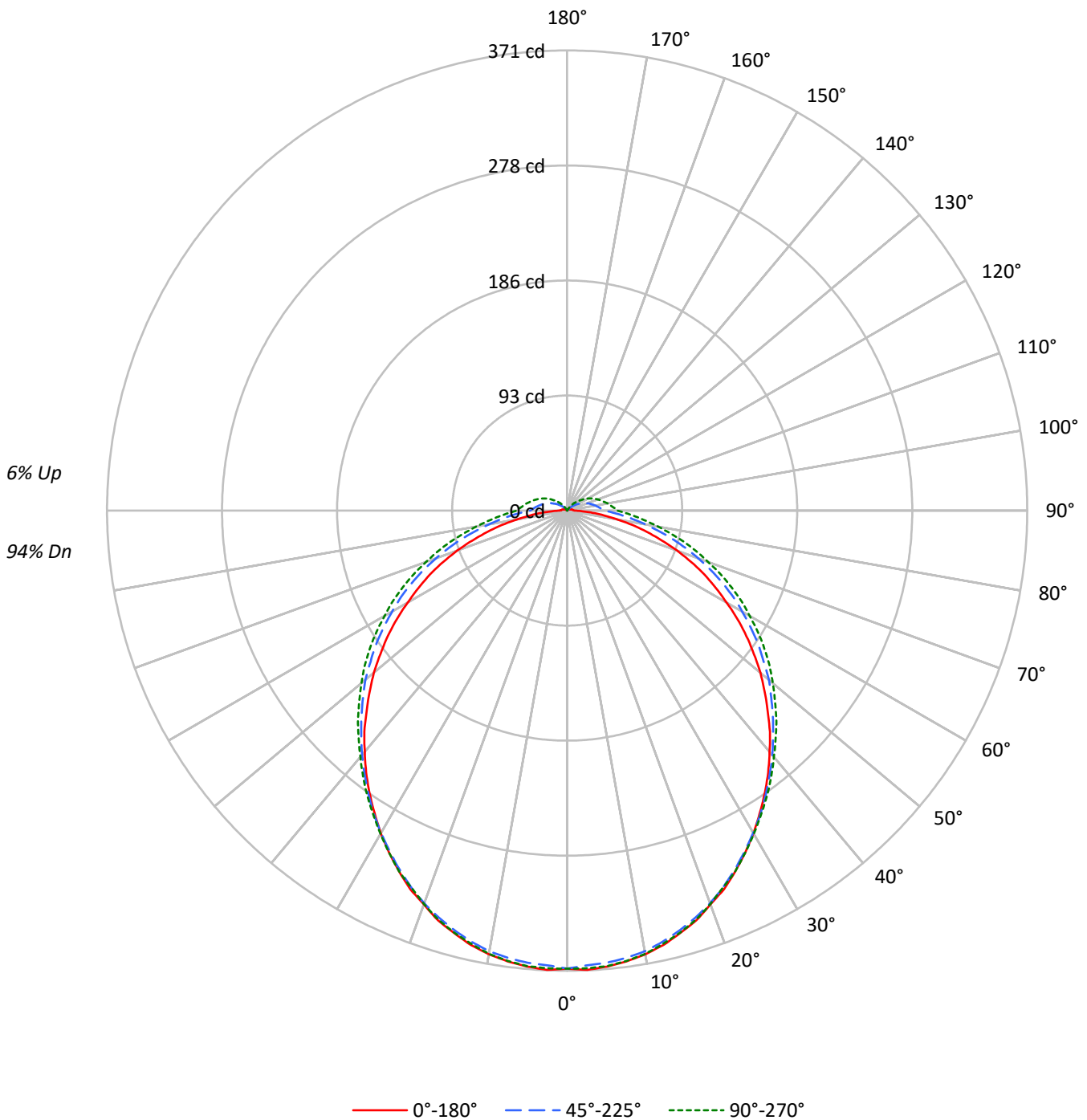
Lumens per Lamp: N/A
Luminaire Lumens: 1146.7 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 11.2
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°	2625	2625	2625
5°	2628	2573	2582
10°	2611	2530	2523
15°	2580	2469	2451
20°	2536	2403	2370
25°	2491	2326	2288
30°	2435	2247	2200
35°	2375	2170	2121
40°	2314	2095	2041
45°	2250	2022	1977
50°	2193	1960	1908
55°	2122	1884	1845
60°	2035	1801	1765
65°	1964	1714	1686
70°	1848	1607	1583
75°	1693	1482	1493
80°	1507	1345	1378
85°	1342	1258	1312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2250 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	34.9	3.0
10°-20°	99.3	8.7
20°-30°	147.8	12.9
30°-40°	175.1	15.3
40°-50°	181.1	15.8
50°-60°	167.1	14.6
60°-70°	135.0	11.8
70°-80°	90.2	7.9
80°-90°	46.6	4.1
90°-100°	26.1	2.3
100°-110°	19.4	1.7
110°-120°	12.9	1.1
120°-130°	7.2	0.6
130°-140°	3.2	0.3
140°-150°	0.7	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	282.0	24.6
0°-40°	457.1	39.9
0°-60°	805.3	70.2
0°-90°	1077.2	93.9
90°-120°	58.4	5.1
90°-150°	69.5	6.1
90°-180°	70.0	6.1
0°-180°	1146.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	369	369	369	369	369	
5°	369	369	366	369	369	35
15°	353	354	350	353	352	99
25°	321	322	320	321	321	148
35°	278	280	279	281	281	174
45°	229	232	234	238	239	177
55°	176	182	188	192	194	158
65°	122	129	138	144	146	120
75°	67	76	87	95	98	71
85°	20	32	45	53	55	21
90°	6	17	30	38	41	4
95°	5	14	26	34	36	4
105°	3	9	20	27	30	4
115°	2	5	14	20	23	2
125°	1	1	8	13	16	1
135°	1	1	3	8	9	1
145°	0	0	0	2	3	0
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°	369.3	369.3	369.3	369.3	369.3
2.5°	370.7	369.6	366.9	369.6	369.3
5°	369.0	368.6	365.9	368.6	368.6
7.5°	366.6	366.2	363.8	366.6	366.2
10°	363.2	363.2	360.8	362.8	362.8
12.5°	358.7	358.7	356.0	358.4	357.7
15°	352.6	353.6	350.5	352.6	352.2
17.5°	346.4	346.4	344.0	345.7	345.7
20°	337.9	339.3	336.9	338.6	337.6
22.5°	330.4	331.1	328.7	330.4	328.7
25°	320.8	322.2	319.5	321.2	320.8
27.5°	310.9	312.0	309.9	312.0	310.9
30°	300.4	301.4	300.0	301.4	301.0
32.5°	289.1	291.1	290.1	291.1	290.8
35°	277.8	279.9	279.2	280.6	280.9
37.5°	266.2	268.3	268.3	270.0	270.3
40°	253.9	256.7	257.3	259.7	259.4
42.5°	242.0	244.7	245.7	248.8	248.8
45°	228.7	232.4	234.5	238.2	238.6
47.5°	216.0	220.1	223.2	226.6	227.3
50°	203.4	207.2	212.3	215.7	216.4
52.5°	189.8	194.5	199.7	204.4	205.8
55°	176.5	181.9	188.1	192.5	194.2
57.5°	162.8	168.6	175.4	180.9	182.3
60°	148.5	155.3	163.1	168.6	170.0
62.5°	135.2	142.7	150.9	156.7	158.7
65°	122.2	129.4	138.2	144.4	146.1
67.5°	108.2	116.0	125.3	132.1	133.8
70°	94.2	102.7	112.6	119.1	120.8
72.5°	79.9	89.4	100.0	107.2	109.2
75°	66.6	76.5	87.4	94.9	97.6
77.5°	53.9	64.2	75.1	82.9	85.3
80°	41.3	51.9	63.8	72.0	74.4
82.5°	30.0	41.3	53.6	61.8	64.2
85°	20.5	32.1	44.7	52.6	55.3
87.5°	12.6	23.9	36.9	44.7	47.4
90°	5.8	17.1	29.7	37.9	40.6
92.5°	5.1	15.7	28.0	36.2	38.6
95°	4.8	14.3	26.3	34.1	36.5
97.5°	4.4	13.0	24.6	32.4	34.8
100°	4.1	11.6	23.2	30.7	33.1
102.5°	3.8	10.6	21.5	29.0	31.1
105°	3.4	9.2	20.1	27.3	29.7
107.5°	3.1	7.9	18.8	25.6	28.0
110°	2.7	6.8	17.1	23.9	26.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.4	5.8	15.7	22.2	24.6
115°	2.4	4.8	14.0	20.5	22.9
117.5°	2.0	3.8	12.3	18.8	21.2
120°	1.7	2.7	10.9	17.1	19.5
122.5°	1.7	2.0	9.6	15.4	17.7
125°	1.4	1.4	8.2	13.3	15.7
127.5°	1.4	1.0	6.8	11.9	13.7
130°	1.0	0.7	5.8	10.6	12.3
132.5°	1.0	0.7	4.4	9.2	10.9
135°	0.7	0.7	3.1	7.9	9.2
137.5°	0.7	0.3	2.0	6.1	7.9
140°	0.3	0.3	0.7	4.8	6.1
142.5°	0.3	0.3	0.3	3.4	4.8
145°	0.3	0.0	0.0	2.0	3.1
147.5°	0.3	0.0	0.0	0.7	1.7
150°	0.0	0.0	0.0	0.0	0.3
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	13.27	14.80	13.72	15.24	15.70	14.36	15.89	14.81	16.33	16.79
	3H	14.92	16.31	15.39	16.76	17.26	16.52	17.91	16.99	18.36	18.87
	4H	15.49	16.80	15.98	17.27	17.79	17.48	18.80	17.97	19.27	19.79
	6H	15.87	17.10	16.38	17.58	18.11	18.39	19.61	18.89	20.09	20.63
	8H	15.98	17.15	16.49	17.66	18.20	18.82	19.99	19.33	20.49	21.03
	12H	16.04	17.17	16.56	17.66	18.24	19.27	20.39	19.79	20.89	21.46
4H	2H	14.03	15.35	14.52	15.82	16.34	14.88	16.20	15.37	16.67	17.19
	3H	15.91	17.03	16.42	17.54	18.08	17.26	18.38	17.77	18.89	19.44
	4H	16.62	17.64	17.14	18.16	18.73	18.38	19.40	18.90	19.92	20.49
	6H	17.13	18.03	17.67	18.58	19.16	19.44	20.34	19.99	20.89	21.48
	8H	17.28	18.13	17.83	18.67	19.28	19.96	20.80	20.51	21.35	21.95
	12H	17.39	18.15	17.96	18.73	19.33	20.51	21.27	21.08	21.85	22.46
8H	4H	17.10	17.94	17.65	18.49	19.09	18.63	19.47	19.18	20.02	20.62
	6H	17.77	18.48	18.35	19.07	19.68	19.86	20.56	20.44	21.16	21.76
	8H	18.01	18.65	18.60	19.25	19.87	20.49	21.13	21.09	21.73	22.35
	12H	18.19	18.76	18.79	19.35	20.04	21.20	21.77	21.79	22.36	23.05
12H	4H	17.20	17.96	17.77	18.54	19.14	18.65	19.41	19.22	19.99	20.60
	6H	17.93	18.57	18.52	19.17	19.79	19.90	20.54	20.50	21.15	21.77
	8H	18.25	18.82	18.84	19.41	20.09	20.61	21.17	21.20	21.77	22.45