

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: P242859

Luminaire Tested: S125DRP-S375D935-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242859
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-17)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S125DRP-S375D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

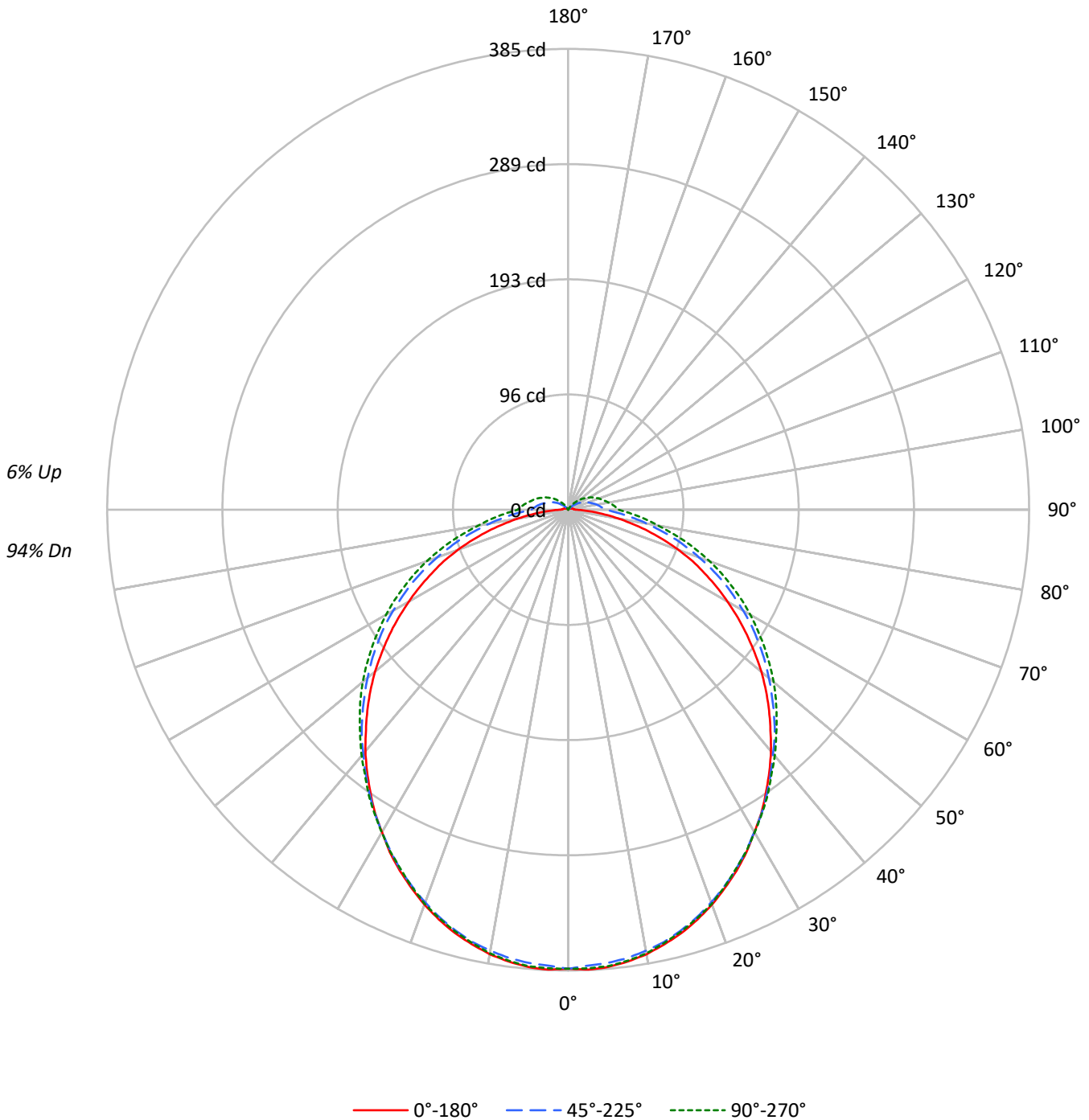
Lumens per Lamp: N/A
Luminaire Lumens: 1187.9 lumens
Efficiency: N/A
Efficacy: 102.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 11.6
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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CATALOG NUMBER: S125DRP-S375D935-X4F0-XX-UDD-D-W

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°	2726	2726	2726
5°	2731	2673	2680
10°	2711	2623	2617
15°	2679	2564	2538
20°	2635	2491	2459
25°	2583	2414	2362
30°	2520	2328	2275
35°	2462	2250	2194
40°	2401	2168	2112
45°	2334	2097	2040
50°	2269	2020	1976
55°	2192	1947	1900
60°	2108	1864	1823
65°	2019	1776	1736
70°	1917	1658	1646
75°	1759	1543	1535
80°	1550	1402	1414
85°	1355	1300	1364

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2334 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.3	3.1
10°-20°	103.0	8.7
20°-30°	153.2	12.9
30°-40°	181.4	15.3
40°-50°	187.5	15.8
50°-60°	172.8	14.5
60°-70°	139.7	11.8
70°-80°	93.5	7.9
80°-90°	48.3	4.1
90°-100°	27.2	2.3
100°-110°	20.1	1.7
110°-120°	13.4	1.1
120°-130°	7.6	0.6
130°-140°	3.3	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°	292.5	24.6
0°-40°	473.9	39.9
0°-60°	834.2	70.2
0°-90°	1115.6	93.9
90°-120°	60.7	5.1
90°-150°	72.3	6.1
90°-180°	72.0	6.1
0°-180°	1187.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	383	380	383	383	36
15°	366	366	364	366	365	103
25°	333	334	332	333	331	153
35°	288	291	290	291	291	180
45°	237	241	243	246	246	183
55°	182	188	194	198	200	163
65°	126	134	143	149	150	125
75°	69	79	91	98	100	73
85°	21	33	46	54	58	22
90°	6	18	31	40	42	4
95°	5	15	27	36	38	4
105°	3	9	21	28	31	4
115°	2	5	15	21	24	2
125°	2	1	9	15	16	1
135°	1	0	3	8	10	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°	383.5	383.5	383.5	383.5	383.5
2.5°	384.6	383.8	381.2	383.8	383.5
5°	383.5	382.7	380.1	383.1	382.7
7.5°	380.8	380.4	377.8	380.4	380.1
10°	377.1	377.1	374.1	376.7	376.3
12.5°	371.8	372.2	369.9	371.8	370.7
15°	366.2	366.5	363.9	366.2	364.7
17.5°	359.0	359.8	357.1	359.0	357.9
20°	351.1	351.9	349.2	350.4	350.4
22.5°	342.1	343.6	340.6	342.1	341.0
25°	332.7	333.8	331.6	333.1	331.2
27.5°	322.6	324.1	321.4	322.6	321.8
30°	310.9	313.2	310.9	311.6	311.3
32.5°	300.4	302.2	300.7	301.5	301.1
35°	288.0	290.6	289.5	290.6	290.6
37.5°	275.9	278.2	277.8	279.3	278.9
40°	263.5	266.5	266.2	267.7	268.4
42.5°	250.0	254.1	255.3	257.1	257.1
45°	237.2	241.3	243.2	245.9	246.2
47.5°	224.1	227.8	230.8	234.6	235.3
50°	210.5	214.7	218.8	222.9	224.1
52.5°	196.2	201.5	206.8	211.3	212.0
55°	182.3	188.3	194.4	198.5	200.0
57.5°	168.0	175.2	182.0	186.5	187.6
60°	153.8	161.3	168.8	174.4	175.6
62.5°	139.8	147.4	155.6	162.0	163.5
65°	125.6	134.2	143.2	148.9	150.4
67.5°	112.4	120.7	129.7	136.5	138.3
70°	97.7	106.4	116.2	123.3	125.6
72.5°	83.5	92.5	103.4	111.3	112.8
75°	69.2	78.9	91.0	98.5	100.4
77.5°	55.3	66.5	77.8	86.1	87.6
80°	42.5	53.8	66.5	74.8	76.3
82.5°	30.8	42.9	56.0	63.9	66.9
85°	20.7	33.1	46.2	54.5	57.5
87.5°	13.2	25.2	38.0	46.6	49.2
90°	6.0	18.0	30.8	39.5	42.1
92.5°	5.3	16.2	29.3	37.6	40.2
95°	4.9	14.7	27.4	35.7	38.3
97.5°	4.5	13.5	25.9	33.8	36.5
100°	4.1	12.0	24.1	32.0	34.2
102.5°	3.8	10.9	22.6	30.1	32.3
105°	3.4	9.4	20.7	28.2	30.8
107.5°	3.0	8.3	19.2	26.7	28.9
110°	2.6	7.1	17.7	24.8	27.4



TEST NUMBER: P242859

CATALOG NUMBER: S125DRP-S375D935-X4F0-XX-UDD-D-W

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.6	6.0	16.2	22.9	25.6
115°	2.3	4.9	14.7	21.4	23.7
117.5°	1.9	3.8	13.2	19.5	22.2
120°	1.9	3.0	11.7	18.0	20.3
122.5°	1.5	1.9	10.2	16.2	18.4
125°	1.5	1.1	8.6	14.7	16.5
127.5°	1.1	0.8	7.1	12.8	15.0
130°	1.1	0.8	6.0	11.3	13.2
132.5°	0.8	0.8	4.5	9.8	11.3
135°	0.8	0.4	3.0	7.9	9.8
137.5°	0.8	0.4	1.9	6.4	7.9
140°	0.4	0.4	0.8	4.9	6.4
142.5°	0.4	0.0	0.0	3.4	4.9
145°	0.4	0.0	0.0	1.9	3.4
147.5°	0.0	0.0	0.0	0.8	1.5
150°	0.0	0.0	0.0	0.0	0.4
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	13.40	14.93	13.86	15.37	15.84	14.44	15.98	14.90	16.42	16.88
	3H	15.05	16.45	15.52	16.90	17.40	16.62	18.02	17.09	18.47	18.97
	4H	15.62	16.94	16.11	17.41	17.93	17.59	18.90	18.08	19.37	19.89
	6H	16.00	17.23	16.51	17.71	18.24	18.48	19.71	18.99	20.19	20.72
	8H	16.11	17.28	16.62	17.78	18.32	18.92	20.09	19.43	20.59	21.13
	12H	16.17	17.29	16.69	17.79	18.36	19.37	20.50	19.90	21.00	21.57
4H	2H	14.16	15.48	14.65	15.95	16.47	14.98	16.30	15.47	16.76	17.28
	3H	16.04	17.16	16.55	17.67	18.21	17.37	18.49	17.87	19.00	19.54
	4H	16.74	17.76	17.27	18.29	18.86	18.48	19.50	19.01	20.03	20.60
	6H	17.25	18.15	17.80	18.70	19.29	19.55	20.44	20.09	20.99	21.58
	8H	17.40	18.25	17.95	18.80	19.40	20.07	20.91	20.62	21.46	22.06
	12H	17.50	18.27	18.08	18.85	19.45	20.62	21.39	21.20	21.96	22.57
8H	4H	17.23	18.07	17.78	18.62	19.22	18.74	19.58	19.29	20.13	20.74
	6H	17.89	18.60	18.47	19.19	19.80	19.96	20.67	20.55	21.26	21.87
	8H	18.13	18.77	18.73	19.37	19.99	20.60	21.24	21.20	21.84	22.47
	12H	18.31	18.88	18.91	19.47	20.16	21.32	21.88	21.91	22.47	23.16
12H	4H	17.33	18.09	17.90	18.67	19.27	18.76	19.52	19.33	20.10	20.71
	6H	18.05	18.69	18.65	19.30	19.92	20.01	20.65	20.61	21.26	21.88
	8H	18.37	18.94	18.97	19.53	20.22	20.72	21.29	21.32	21.88	22.57