

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: P242835

Luminaire Tested: S125DRP-S375D927-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P242835
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-S375D927-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

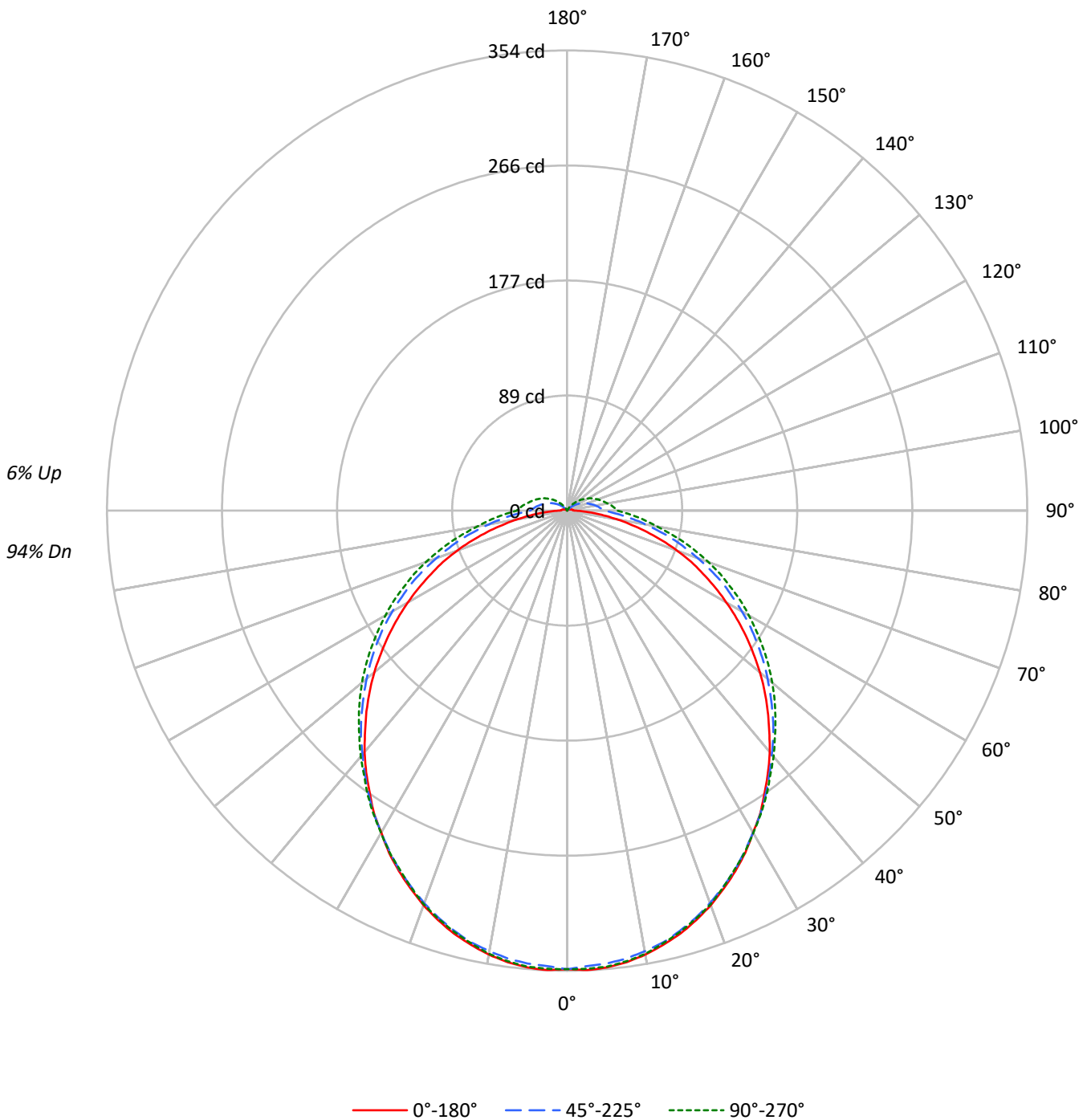
Lumens per Lamp: N/A
Luminaire Lumens: 1092.9 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

Input Watts (W): 11.6
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°	2507	2507	2507
5°	2512	2459	2466
10°	2494	2413	2408
15°	2465	2359	2335
20°	2425	2292	2263
25°	2377	2221	2173
30°	2318	2142	2093
35°	2264	2070	2019
40°	2210	1994	1944
45°	2148	1929	1877
50°	2088	1858	1817
55°	2017	1791	1748
60°	1939	1715	1677
65°	1857	1635	1597
70°	1764	1526	1514
75°	1617	1419	1413
80°	1426	1290	1301
85°	1244	1196	1255

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2148 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	33.4	3.1
10°-20°	94.8	8.7
20°-30°	140.9	12.9
30°-40°	166.9	15.3
40°-50°	172.6	15.8
50°-60°	159.0	14.5
60°-70°	128.5	11.8
70°-80°	86.0	7.9
80°-90°	44.4	4.1
90°-100°	25.0	2.3
100°-110°	18.4	1.7
110°-120°	12.4	1.1
120°-130°	7.0	0.6
130°-140°	3.1	0.3
140°-150°	0.6	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	269.1	24.6
0°-40°	436.0	39.9
0°-60°	767.5	70.2
0°-90°	1026.4	93.9
90°-120°	55.8	5.1
90°-150°	66.5	6.1
90°-180°	67.0	6.1
0°-180°	1092.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	353	353	353	353	353	
5°	353	352	350	352	352	33
15°	337	337	335	337	336	95
25°	306	307	305	306	305	141
35°	265	267	266	267	267	166
45°	218	222	224	226	227	168
55°	168	173	179	183	184	150
65°	116	124	132	137	138	115
75°	64	73	84	91	92	67
85°	19	30	42	50	53	20
90°	6	17	28	36	39	4
95°	4	14	25	33	35	4
105°	3	9	19	26	28	3
115°	2	4	14	20	22	2
125°	1	1	8	14	15	1
135°	1	0	3	7	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°	352.8	352.8	352.8	352.8	352.8
2.5°	353.8	353.1	350.7	353.1	352.8
5°	352.8	352.1	349.7	352.5	352.1
7.5°	350.4	350.0	347.6	350.0	349.7
10°	346.9	346.9	344.2	346.6	346.2
12.5°	342.1	342.4	340.4	342.1	341.0
15°	336.9	337.2	334.8	336.9	335.5
17.5°	330.3	331.0	328.6	330.3	329.3
20°	323.1	323.7	321.3	322.4	322.4
22.5°	314.8	316.1	313.4	314.8	313.7
25°	306.1	307.1	305.1	306.5	304.7
27.5°	296.8	298.2	295.7	296.8	296.1
30°	286.0	288.1	286.0	286.7	286.4
32.5°	276.4	278.1	276.7	277.4	277.1
35°	264.9	267.4	266.3	267.4	267.4
37.5°	253.9	256.0	255.6	257.0	256.6
40°	242.5	245.2	244.9	246.3	247.0
42.5°	230.0	233.8	234.9	236.6	236.6
45°	218.3	222.1	223.8	226.2	226.6
47.5°	206.1	209.6	212.4	215.8	216.5
50°	193.7	197.5	201.3	205.1	206.1
52.5°	180.6	185.4	190.2	194.4	195.1
55°	167.8	173.3	178.8	182.6	184.0
57.5°	154.6	161.2	167.4	171.6	172.6
60°	141.5	148.4	155.3	160.5	161.5
62.5°	128.7	135.6	143.2	149.1	150.5
65°	115.5	123.5	131.8	137.0	138.4
67.5°	103.4	111.0	119.3	125.6	127.3
70°	89.9	97.9	106.9	113.5	115.5
72.5°	76.8	85.1	95.1	102.4	103.8
75°	63.6	72.6	83.7	90.6	92.4
77.5°	50.8	61.2	71.6	79.2	80.6
80°	39.1	49.5	61.2	68.8	70.2
82.5°	28.4	39.4	51.5	58.8	61.6
85°	19.0	30.4	42.5	50.2	52.9
87.5°	12.1	23.2	34.9	42.9	45.3
90°	5.5	16.6	28.4	36.3	38.7
92.5°	4.8	14.9	27.0	34.6	37.0
95°	4.5	13.5	25.2	32.9	35.3
97.5°	4.2	12.5	23.9	31.1	33.6
100°	3.8	11.1	22.1	29.4	31.5
102.5°	3.5	10.0	20.8	27.7	29.7
105°	3.1	8.6	19.0	25.9	28.4
107.5°	2.8	7.6	17.6	24.6	26.6
110°	2.4	6.6	16.3	22.8	25.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.4	5.5	14.9	21.1	23.5
115°	2.1	4.5	13.5	19.7	21.8
117.5°	1.7	3.5	12.1	18.0	20.4
120°	1.7	2.8	10.7	16.6	18.7
122.5°	1.4	1.7	9.3	14.9	16.9
125°	1.4	1.0	8.0	13.5	15.2
127.5°	1.0	0.7	6.6	11.8	13.8
130°	1.0	0.7	5.5	10.4	12.1
132.5°	0.7	0.7	4.2	9.0	10.4
135°	0.7	0.3	2.8	7.3	9.0
137.5°	0.7	0.3	1.7	5.9	7.3
140°	0.3	0.3	0.7	4.5	5.9
142.5°	0.3	0.0	0.0	3.1	4.5
145°	0.3	0.0	0.0	1.7	3.1
147.5°	0.0	0.0	0.0	0.7	1.4
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	13.11	14.65	13.57	15.08	15.55	14.16	15.69	14.61	16.13	16.59
	3H	14.76	16.16	15.23	16.61	17.11	16.33	17.73	16.80	18.18	18.68
	4H	15.33	16.65	15.82	17.12	17.64	17.30	18.61	17.79	19.08	19.60
	6H	15.71	16.94	16.21	17.42	17.95	18.19	19.42	18.70	19.90	20.43
	8H	15.82	16.99	16.33	17.49	18.03	18.63	19.80	19.14	20.30	20.85
	12H	15.88	17.00	16.40	17.50	18.07	19.09	20.21	19.61	20.71	21.28
4H	2H	13.87	15.19	14.37	15.66	16.18	14.69	16.01	15.18	16.47	16.99
	3H	15.75	16.87	16.26	17.38	17.92	17.08	18.20	17.59	18.71	19.25
	4H	16.46	17.47	16.98	18.00	18.57	18.19	19.21	18.72	19.74	20.31
	6H	16.96	17.86	17.51	18.41	19.00	19.26	20.16	19.80	20.70	21.29
	8H	17.11	17.96	17.66	18.51	19.11	19.78	20.62	20.33	21.17	21.77
	12H	17.21	17.98	17.79	18.56	19.16	20.34	21.10	20.91	21.68	22.28
8H	4H	16.94	17.78	17.49	18.33	18.93	18.45	19.30	19.00	19.84	20.45
	6H	17.60	18.31	18.19	18.90	19.51	19.67	20.38	20.26	20.98	21.58
	8H	17.84	18.48	18.44	19.08	19.70	20.31	20.95	20.91	21.56	22.18
	12H	18.02	18.59	18.62	19.18	19.87	21.03	21.59	21.62	22.19	22.87
12H	4H	17.04	17.80	17.61	18.38	18.98	18.47	19.23	19.04	19.81	20.42
	6H	17.76	18.40	18.36	19.01	19.63	19.72	20.36	20.32	20.97	21.59
	8H	18.08	18.65	18.68	19.24	19.93	20.43	21.00	21.03	21.59	22.28