

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: P243719

Luminaire Tested: S125DRP-H375D935-X4F0-XX-UDD-D-W

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-2024
Report Number: P243719
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-H375D935-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

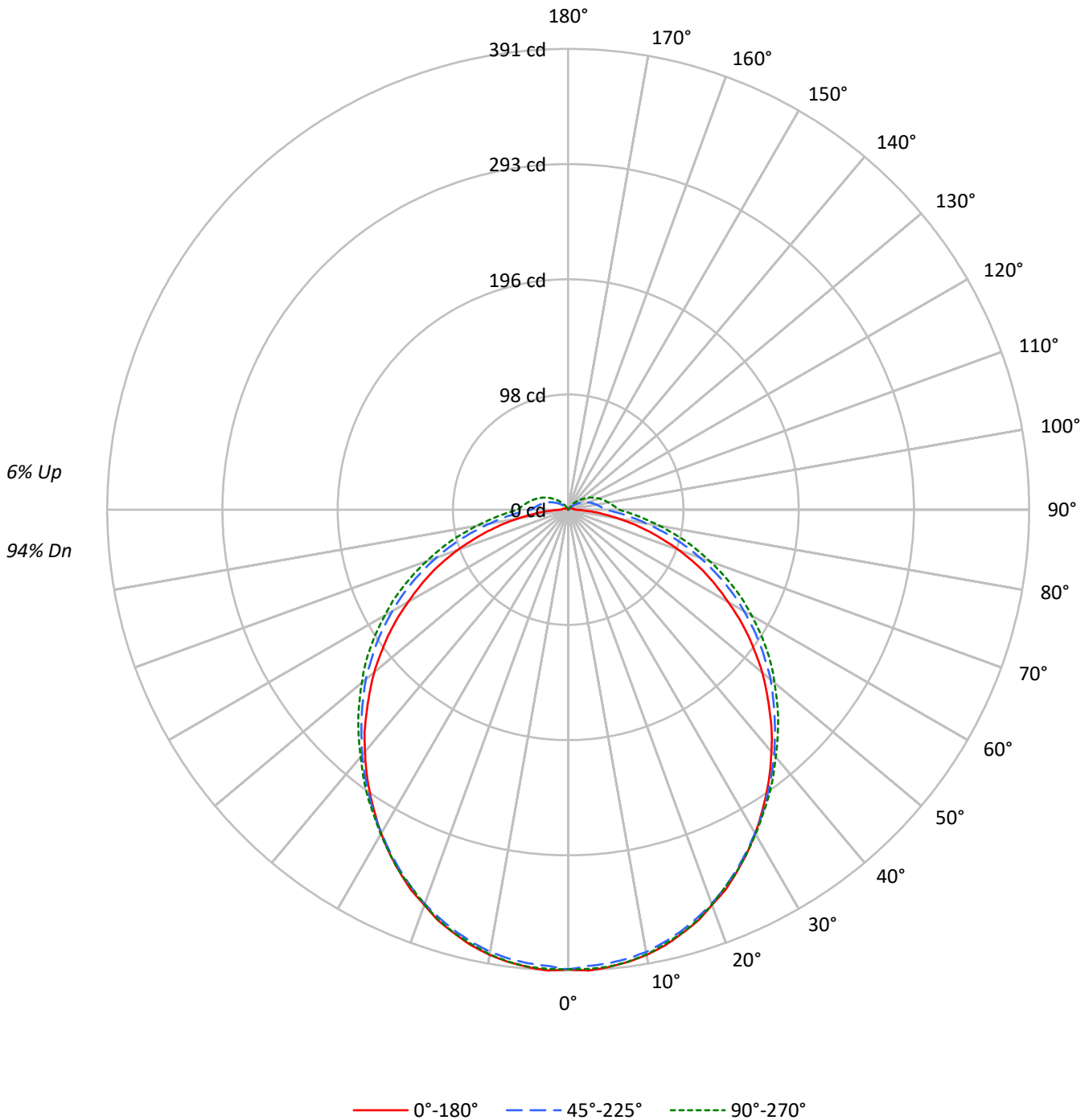
Lumens per Lamp: N/A
Luminaire Lumens: 1210.9 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.39' x L: 3.88' x H: 0.08')
CIE Type: Direct

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	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°	2772	2772	2772
5°	2774	2717	2727
10°	2757	2671	2665
15°	2724	2608	2589
20°	2678	2538	2502
25°	2631	2456	2417
30°	2571	2373	2323
35°	2508	2292	2239
40°	2444	2213	2156
45°	2376	2134	2087
50°	2316	2070	2015
55°	2240	1989	1948
60°	2149	1902	1863
65°	2074	1811	1781
70°	1952	1697	1672
75°	1787	1565	1577
80°	1591	1421	1456
85°	1414	1329	1386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2376 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	36.9	3.0
10°-20°	104.8	8.7
20°-30°	156.1	12.9
30°-40°	184.9	15.3
40°-50°	191.3	15.8
50°-60°	176.5	14.6
60°-70°	142.6	11.8
70°-80°	95.3	7.9
80°-90°	49.1	4.1
90°-100°	27.6	2.3
100°-110°	20.5	1.7
110°-120°	13.6	1.1
120°-130°	7.6	0.6
130°-140°	3.4	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°	297.8	24.6
0°-40°	482.7	39.9
0°-60°	850.5	70.2
0°-90°	1137.5	93.9
90°-120°	61.6	5.1
90°-150°	73.4	6.1
90°-180°	73.0	6.0
0°-180°	1210.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	390	389	386	389	389	37
15°	372	373	370	372	372	105
25°	339	340	337	339	339	156
35°	293	296	295	296	297	184
45°	242	246	248	252	252	187
55°	186	192	199	203	205	166
65°	129	137	146	152	154	127
75°	70	81	92	100	103	75
85°	22	34	47	56	58	22
90°	6	18	31	40	43	4
95°	5	15	28	36	39	4
105°	4	10	21	29	31	4
115°	2	5	15	22	24	2
125°	1	1	9	14	17	1
135°	1	1	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°	390.0	390.0	390.0	390.0	390.0
2.5°	391.4	390.4	387.5	390.4	390.0
5°	389.6	389.3	386.4	389.3	389.3
7.5°	387.1	386.8	384.2	387.1	386.8
10°	383.5	383.5	381.0	383.1	383.1
12.5°	378.8	378.8	375.9	378.5	377.7
15°	372.3	373.4	370.2	372.3	372.0
17.5°	365.8	365.8	363.3	365.1	365.1
20°	356.8	358.3	355.8	357.6	356.5
22.5°	348.9	349.6	347.1	348.9	347.1
25°	338.8	340.3	337.4	339.2	338.8
27.5°	328.4	329.4	327.3	329.4	328.4
30°	317.2	318.3	316.8	318.3	317.9
32.5°	305.3	307.5	306.4	307.5	307.1
35°	293.4	295.6	294.8	296.3	296.6
37.5°	281.1	283.3	283.3	285.1	285.5
40°	268.2	271.1	271.8	274.3	273.9
42.5°	255.6	258.4	259.5	262.8	262.8
45°	241.5	245.5	247.6	251.6	251.9
47.5°	228.2	232.5	235.7	239.3	240.1
50°	214.8	218.8	224.2	227.8	228.5
52.5°	200.4	205.5	210.9	215.9	217.3
55°	186.3	192.1	198.6	203.3	205.1
57.5°	171.9	178.1	185.3	191.0	192.5
60°	156.8	164.0	172.3	178.1	179.5
62.5°	142.7	150.7	159.3	165.4	167.6
65°	129.0	136.6	146.0	152.5	154.3
67.5°	114.3	122.6	132.3	139.5	141.3
70°	99.5	108.5	118.9	125.8	127.6
72.5°	84.3	94.4	105.6	113.2	115.3
75°	70.3	80.7	92.3	100.2	103.1
77.5°	56.9	67.8	79.3	87.6	90.1
80°	43.6	54.8	67.4	76.1	78.6
82.5°	31.7	43.6	56.6	65.2	67.8
85°	21.6	33.9	47.2	55.5	58.4
87.5°	13.3	25.2	38.9	47.2	50.1
90°	6.1	18.0	31.4	40.0	42.9
92.5°	5.4	16.6	29.6	38.2	40.7
95°	5.0	15.1	27.8	36.0	38.6
97.5°	4.7	13.7	26.0	34.2	36.8
100°	4.3	12.3	24.5	32.4	35.0
102.5°	4.0	11.2	22.7	30.6	32.8
105°	3.6	9.7	21.3	28.8	31.4
107.5°	3.2	8.3	19.8	27.0	29.6
110°	2.9	7.2	18.0	25.2	27.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	2.5	6.1	16.6	23.4	26.0
115°	2.5	5.0	14.8	21.6	24.1
117.5°	2.2	4.0	13.0	19.8	22.3
120°	1.8	2.9	11.5	18.0	20.5
122.5°	1.8	2.2	10.1	16.2	18.7
125°	1.4	1.4	8.7	14.1	16.6
127.5°	1.4	1.1	7.2	12.6	14.4
130°	1.1	0.7	6.1	11.2	13.0
132.5°	1.1	0.7	4.7	9.7	11.5
135°	0.7	0.7	3.2	8.3	9.7
137.5°	0.7	0.4	2.2	6.5	8.3
140°	0.4	0.4	0.7	5.0	6.5
142.5°	0.4	0.4	0.4	3.6	5.0
145°	0.4	0.0	0.0	2.2	3.2
147.5°	0.4	0.0	0.0	0.7	1.8
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	13.46	14.99	13.91	15.43	15.89	14.54	16.08	15.00	16.52	16.98
	3H	15.11	16.50	15.58	16.95	17.46	16.71	18.10	17.18	18.55	19.06
	4H	15.68	17.00	16.17	17.46	17.98	17.67	18.99	18.16	19.46	19.98
	6H	16.06	17.29	16.57	17.77	18.30	18.58	19.80	19.08	20.28	20.82
	8H	16.17	17.34	16.68	17.85	18.39	19.01	20.18	19.52	20.68	21.22
	12H	16.23	17.36	16.75	17.85	18.43	19.46	20.58	19.98	21.08	21.65
4H	2H	14.22	15.54	14.71	16.01	16.53	15.07	16.39	15.56	16.86	17.38
	3H	16.10	17.22	16.61	17.73	18.27	17.45	18.57	17.96	19.08	19.62
	4H	16.81	17.83	17.33	18.35	18.92	18.57	19.58	19.09	20.11	20.68
	6H	17.32	18.22	17.86	18.77	19.35	19.63	20.53	20.18	21.08	21.67
	8H	17.47	18.31	18.02	18.86	19.46	20.15	20.99	20.70	21.54	22.14
	12H	17.58	18.34	18.15	18.92	19.52	20.70	21.46	21.27	22.04	22.65
8H	4H	17.29	18.13	17.84	18.68	19.28	18.82	19.66	19.37	20.21	20.81
	6H	17.96	18.67	18.54	19.26	19.87	20.05	20.76	20.63	21.35	21.95
	8H	18.20	18.84	18.79	19.44	20.06	20.68	21.32	21.28	21.92	22.54
	12H	18.38	18.95	18.98	19.54	20.23	21.39	21.96	21.98	22.55	23.24
12H	4H	17.39	18.15	17.96	18.73	19.33	18.84	19.60	19.41	20.18	20.79
	6H	18.12	18.76	18.71	19.36	19.98	20.09	20.73	20.69	21.34	21.96
	8H	18.44	19.00	19.03	19.60	20.28	20.80	21.36	21.39	21.96	22.64