

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: NEO-RAY

Report Number: P243719

Luminaire Tested: **S125DR-H375D935-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
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 (FORMERLY EATON)  
Product Line: NEO-RAY  
Catalog Number: S125DR-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: ELECTRONIC 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

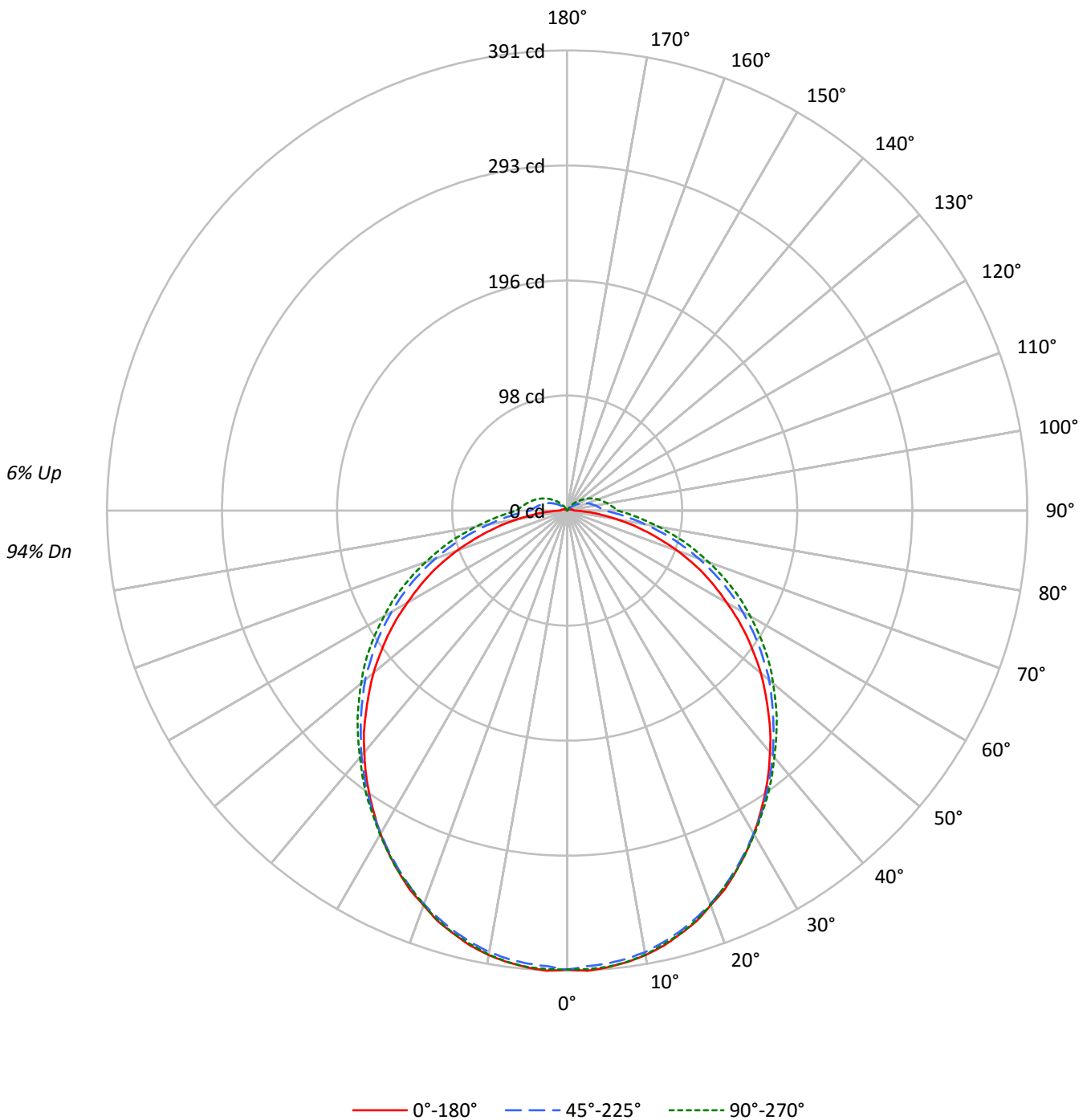
Input Watts (W): 11.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	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



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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

(END OF REPORT)