

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: P242857

Luminaire Tested: **S125DR-S1090D930-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242857
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 (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S1090D930-X4F0-XX-UDD-D-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3285.3 lumens
Efficiency: N/A
Efficacy: 94.4 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

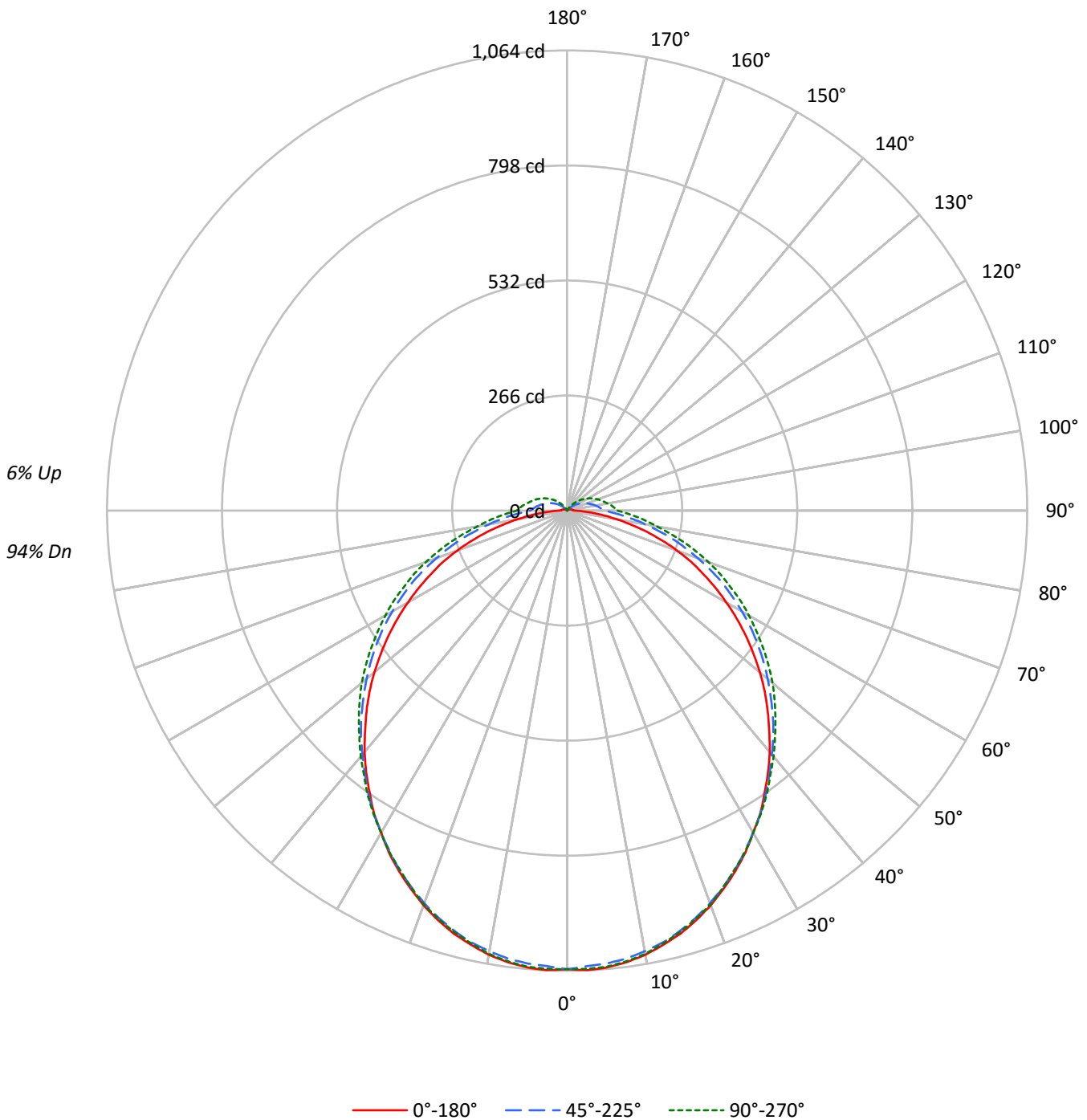
Input Watts (W): 34.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7537	7537	7537
5°	7552	7392	7413
10°	7497	7254	7239
15°	7409	7090	7020
20°	7288	6889	6801
25°	7144	6675	6534
30°	6970	6439	6291
35°	6807	6223	6067
40°	6642	5995	5843
45°	6456	5799	5642
50°	6277	5586	5464
55°	6063	5384	5254
60°	5827	5154	5040
65°	5583	4913	4800
70°	5304	4586	4551
75°	4863	4266	4245
80°	4286	3879	3911
85°	3744	3600	3775



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.4	3.1
10°-20°	284.9	8.7
20°-30°	423.6	12.9
30°-40°	501.7	15.3
40°-50°	518.7	15.8
50°-60°	477.8	14.5
60°-70°	386.2	11.8
70°-80°	258.4	7.9
80°-90°	133.6	4.1
90°-100°	75.2	2.3
100°-110°	55.5	1.7
110°-120°	37.1	1.1
120°-130°	21.0	0.6
130°-140°	9.2	0.3
140°-150°	1.8	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	808.9	24.6
0°-40°	1310.6	39.9
0°-60°	2307.1	70.2
0°-90°	3085.3	93.9
90°-120°	167.9	5.1
90°-150°	199.9	6.1
90°-180°	200.0	6.1
0°-180°	3285.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1060	1060	1060	1060	1060	
5°	1060	1058	1051	1060	1058	101
15°	1013	1014	1006	1013	1008	285
25°	920	923	917	921	916	424
35°	796	804	801	804	804	499
45°	656	668	673	680	681	506
55°	504	521	538	549	553	451
65°	347	371	396	412	416	345
75°	191	218	252	272	278	203
85°	57	92	128	151	159	60
90°	17	50	85	109	116	12
95°	14	40	76	99	106	11
105°	9	26	57	78	85	10
115°	6	14	40	59	66	6
125°	4	3	24	40	46	4
135°	2	1	8	22	27	2
145°	1	0	0	5	9	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°	1060.5	1060.5	1060.5	1060.5	1060.5
2.5°	1063.6	1061.5	1054.3	1061.5	1060.5
5°	1060.5	1058.4	1051.1	1059.5	1058.4
7.5°	1053.2	1052.2	1044.9	1052.2	1051.1
10°	1042.8	1042.8	1034.5	1041.8	1040.7
12.5°	1028.3	1029.3	1023.1	1028.3	1025.2
15°	1012.7	1013.7	1006.4	1012.7	1008.5
17.5°	992.9	995.0	987.7	992.9	989.8
20°	971.1	973.2	965.9	969.0	969.0
22.5°	946.1	950.3	942.0	946.1	943.0
25°	920.1	923.3	917.0	921.2	916.0
27.5°	892.1	896.2	888.9	892.1	890.0
30°	859.8	866.1	859.8	861.9	860.9
32.5°	830.7	835.9	831.8	833.8	832.8
35°	796.4	803.7	800.6	803.7	803.7
37.5°	763.1	769.4	768.3	772.5	771.5
40°	728.8	737.2	736.1	740.3	742.4
42.5°	691.4	702.8	706.0	711.2	711.2
45°	656.1	667.5	672.7	680.0	681.0
47.5°	619.7	630.1	638.4	648.8	650.9
50°	582.2	593.7	605.1	616.5	619.7
52.5°	542.7	557.3	571.8	584.3	586.4
55°	504.3	520.9	537.5	549.0	553.1
57.5°	464.7	484.5	503.2	515.7	518.8
60°	425.2	446.0	466.8	482.4	485.5
62.5°	386.8	407.6	430.4	448.1	452.3
65°	347.3	371.2	396.1	411.7	415.9
67.5°	310.9	333.7	358.7	377.4	382.6
70°	270.3	294.2	321.3	341.0	347.3
72.5°	230.8	255.8	285.9	307.8	311.9
75°	191.3	218.3	251.6	272.4	277.6
77.5°	152.8	184.0	215.2	238.1	242.3
80°	117.5	148.7	184.0	206.9	211.1
82.5°	85.3	118.5	154.9	176.8	185.1
85°	57.2	91.5	127.9	150.8	159.1
87.5°	36.4	69.7	105.0	128.9	136.2
90°	16.6	49.9	85.3	109.2	116.4
92.5°	14.6	44.7	81.1	104.0	111.2
95°	13.5	40.5	75.9	98.8	106.1
97.5°	12.5	37.4	71.7	93.6	100.9
100°	11.4	33.3	66.5	88.4	94.6
102.5°	10.4	30.2	62.4	83.2	89.4
105°	9.4	26.0	57.2	78.0	85.3
107.5°	8.3	22.9	53.0	73.8	80.1
110°	7.3	19.8	48.9	68.6	75.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7.3	16.6	44.7	63.4	70.7
115°	6.2	13.5	40.5	59.3	65.5
117.5°	5.2	10.4	36.4	54.1	61.3
120°	5.2	8.3	32.2	49.9	56.1
122.5°	4.2	5.2	28.1	44.7	50.9
125°	4.2	3.1	23.9	40.5	45.7
127.5°	3.1	2.1	19.8	35.4	41.6
130°	3.1	2.1	16.6	31.2	36.4
132.5°	2.1	2.1	12.5	27.0	31.2
135°	2.1	1.0	8.3	21.8	27.0
137.5°	2.1	1.0	5.2	17.7	21.8
140°	1.0	1.0	2.1	13.5	17.7
142.5°	1.0	0.0	0.0	9.4	13.5
145°	1.0	0.0	0.0	5.2	9.4
147.5°	0.0	0.0	0.0	2.1	4.2
150°	0.0	0.0	0.0	0.0	1.0
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)