

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: P242797

Luminaire Tested: **S125DR-S850D940-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242797
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-12)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DR-S850D940-X4F0-XX-UDD-F-W
Description: DEFINE 5 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2933.6 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.39' x L: 3.88' x H: 0')
CIE Type: Direct

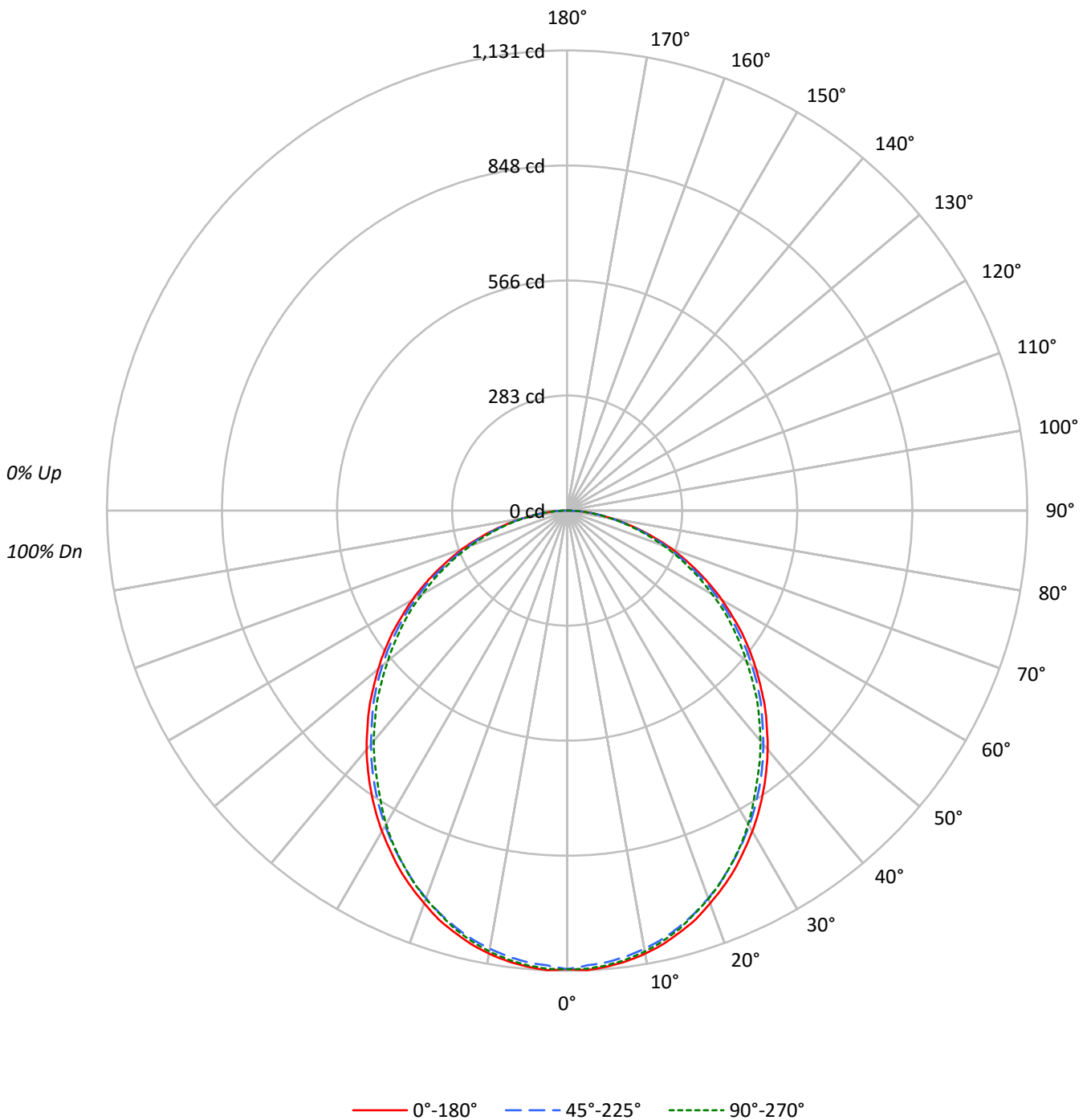
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8011	8011	8011
5°	8028	7952	8003
10°	7980	7896	7942
15°	7893	7801	7834
20°	7770	7669	7682
25°	7636	7510	7503
30°	7472	7340	7303
35°	7296	7156	7056
40°	7115	6958	6858
45°	6919	6776	6642
50°	6705	6557	6360
55°	6497	6310	6132
60°	6249	6058	5844
65°	5953	5758	5563
70°	5671	5411	5226
75°	5168	4995	4825
80°	4600	4527	4416
85°	3996	4069	3857



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.4	3.6
10°-20°	300.4	10.2
20°-30°	443.5	15.1
30°-40°	517.5	17.6
40°-50°	519.7	17.7
50°-60°	456.2	15.6
60°-70°	339.8	11.6
70°-80°	194.1	6.6
80°-90°	56.0	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	850.3	29.0
0°-40°	1367.8	46.6
0°-60°	2343.7	79.9
0°-90°	2933.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2933.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1127	1127	1127	1127	1127	
5°	1125	1124	1115	1123	1122	107
15°	1073	1070	1060	1065	1065	302
25°	974	969	958	960	957	448
35°	841	837	825	820	813	526
45°	688	685	674	663	661	530
55°	524	522	509	501	495	468
65°	354	352	342	334	331	351
75°	188	186	182	179	176	200
85°	49	50	50	49	47	57
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1127.1	1127.1	1127.1	1127.1	1127.1
2.5°	1130.7	1128.0	1119.1	1128.0	1127.1
5°	1125.3	1123.6	1114.6	1122.7	1121.8
7.5°	1117.3	1115.5	1105.7	1113.7	1112.9
10°	1105.7	1103.9	1094.1	1101.3	1100.4
12.5°	1091.5	1087.9	1079.0	1084.3	1084.3
15°	1072.7	1070.1	1060.2	1064.7	1064.7
17.5°	1053.1	1048.7	1038.8	1044.2	1039.7
20°	1027.3	1025.5	1013.9	1020.1	1015.7
22.5°	1001.4	997.8	987.1	990.7	988.0
25°	973.7	969.3	957.7	959.5	956.8
27.5°	941.6	939.0	927.4	928.3	925.6
30°	910.4	907.8	894.4	892.6	889.9
32.5°	876.6	872.1	860.5	856.9	851.6
35°	840.9	837.3	824.8	820.4	813.2
37.5°	804.3	799.9	788.3	782.0	777.6
40°	766.9	762.4	749.9	741.9	739.2
42.5°	726.7	723.2	710.7	703.6	699.1
45°	688.4	684.8	674.1	663.4	660.8
47.5°	646.5	647.4	634.0	623.3	617.1
50°	606.4	603.7	593.0	581.4	575.2
52.5°	565.3	563.6	552.0	542.2	535.0
55°	524.3	521.7	509.2	501.1	494.9
57.5°	480.6	479.7	469.0	458.3	455.7
60°	439.6	436.0	426.2	417.3	411.1
62.5°	396.8	394.1	386.1	376.3	371.8
65°	354.0	352.2	342.4	334.4	330.8
67.5°	312.1	308.5	301.4	294.3	292.5
70°	272.9	268.4	260.4	255.0	251.5
72.5°	230.1	227.4	222.9	216.7	213.1
75°	188.2	186.4	181.9	179.2	175.7
77.5°	148.9	148.0	145.3	143.6	140.9
80°	112.4	112.4	110.6	109.7	107.9
82.5°	80.3	78.5	78.5	76.7	76.7
85°	49.0	49.9	49.9	49.0	47.3
87.5°	24.1	24.1	23.2	23.2	21.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)