

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: P242448

Luminaire Tested: **S123DR-S775D935-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242448
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-11)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-S775D935-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2606.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

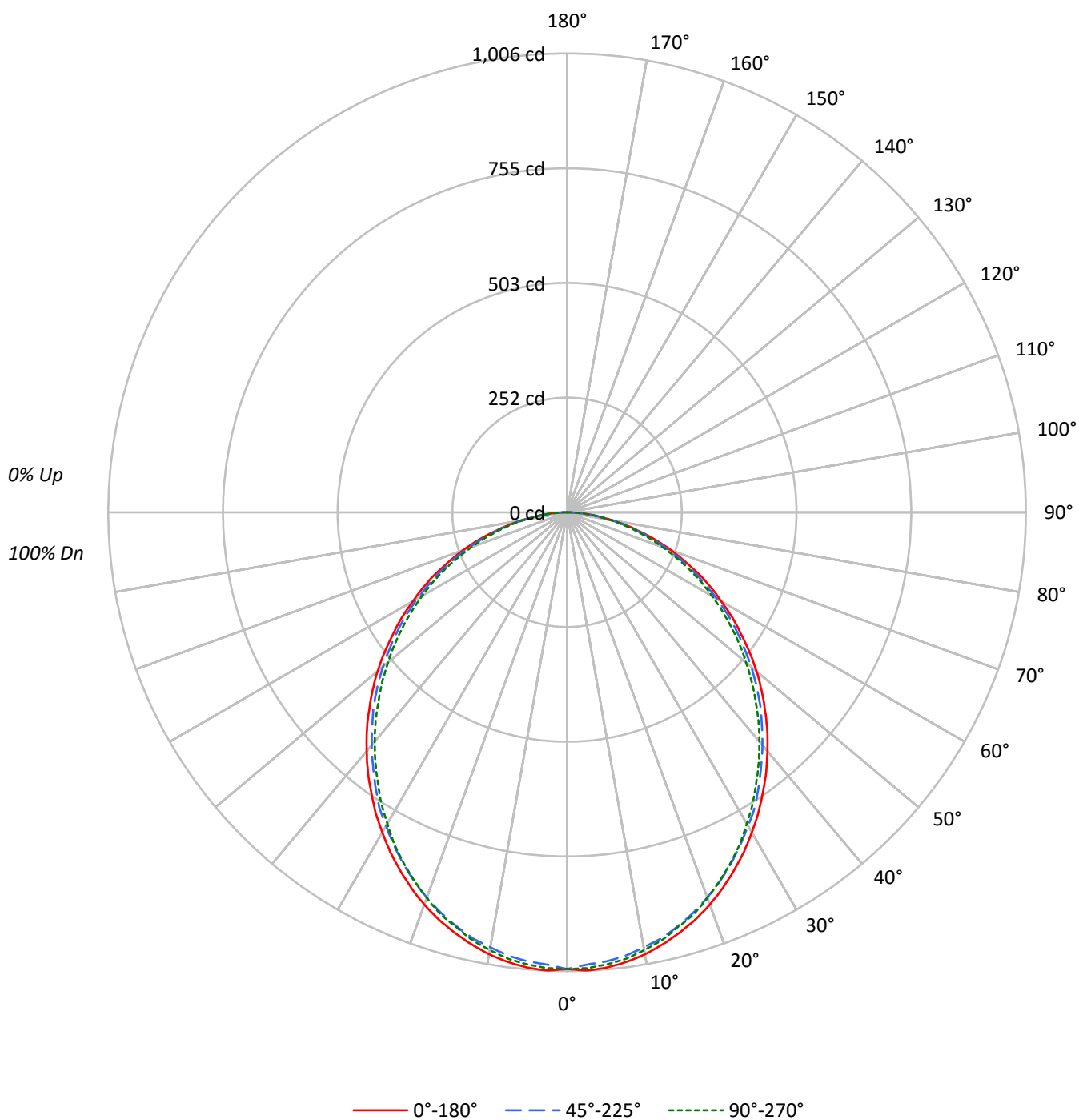
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
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°	12137	12137	12137
5°	12194	12026	12110
10°	12113	11922	11997
15°	11972	11787	11810
20°	11805	11595	11605
25°	11585	11365	11343
30°	11340	11110	11026
35°	11085	10842	10701
40°	10817	10545	10382
45°	10523	10273	10021
50°	10228	9936	9661
55°	9844	9588	9298
60°	9455	9183	8892
65°	9112	8742	8470
70°	8605	8240	7871
75°	7863	7582	7259
80°	7092	6792	6729
85°	6231	5980	5744

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	3.6
10°-20°	266.5	10.2
20°-30°	393.7	15.1
30°-40°	459.8	17.6
40°-50°	462.2	17.7
50°-60°	406.0	15.6
60°-70°	302.4	11.6
70°-80°	172.1	6.6
80°-90°	48.9	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°	754.6	29.0
0°-40°	1214.4	46.6
0°-60°	2082.6	79.9
0°-90°	2606.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2606.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	1002	998	988	997	995	95
15°	954	950	939	946	941	269
25°	866	861	850	851	848	399
35°	749	744	733	728	723	469
45°	614	610	599	589	585	474
55°	466	465	454	444	440	417
65°	318	313	305	298	295	313
75°	168	164	162	158	155	179
85°	45	43	43	41	41	51
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.3	1001.3	1001.3	1001.3	1001.3
2.5°	1005.6	1002.2	992.7	1001.3	1000.5
5°	1002.2	997.9	988.4	997.0	995.3
7.5°	994.5	990.1	980.7	988.4	987.6
10°	984.1	979.8	968.6	976.4	974.7
12.5°	970.3	966.9	956.6	961.7	960.9
15°	954.0	950.5	939.3	946.2	941.1
17.5°	935.9	931.6	920.4	925.6	923.9
20°	915.2	910.1	898.9	902.3	899.7
22.5°	892.0	886.8	875.6	878.2	874.8
25°	866.2	861.0	849.8	850.7	848.1
27.5°	839.5	834.3	822.3	823.1	820.5
30°	810.2	805.9	793.8	793.8	787.8
32.5°	780.9	774.9	766.3	760.3	757.7
35°	749.1	743.9	732.7	727.5	723.2
37.5°	717.2	710.3	699.1	693.1	690.5
40°	683.6	678.5	666.4	659.5	656.1
42.5°	650.1	644.0	632.0	625.1	621.6
45°	613.9	610.4	599.3	588.9	584.6
47.5°	578.6	573.4	563.1	552.8	549.3
50°	542.4	538.1	526.9	517.5	512.3
52.5°	504.5	502.0	489.9	482.2	477.0
55°	465.8	464.9	453.7	444.3	440.0
57.5°	429.6	426.2	417.6	409.0	403.8
60°	390.0	389.2	378.8	371.1	366.8
62.5°	354.7	352.1	341.8	334.1	331.5
65°	317.7	313.4	304.8	297.9	295.3
67.5°	278.1	274.7	267.8	261.7	258.3
70°	242.8	237.6	232.5	226.4	222.1
72.5°	205.8	202.3	196.3	191.1	189.4
75°	167.9	164.5	161.9	157.6	155.0
77.5°	134.3	132.6	129.1	125.7	125.7
80°	101.6	99.0	97.3	96.4	96.4
82.5°	69.7	69.7	69.7	68.0	67.2
85°	44.8	43.0	43.0	41.3	41.3
87.5°	22.4	19.8	18.9	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)