

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: P242423

Luminaire Tested: **S123DR-S560D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242423
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-S560D927-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1721.6 lumens
Efficiency: N/A
Efficacy: 91.6 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

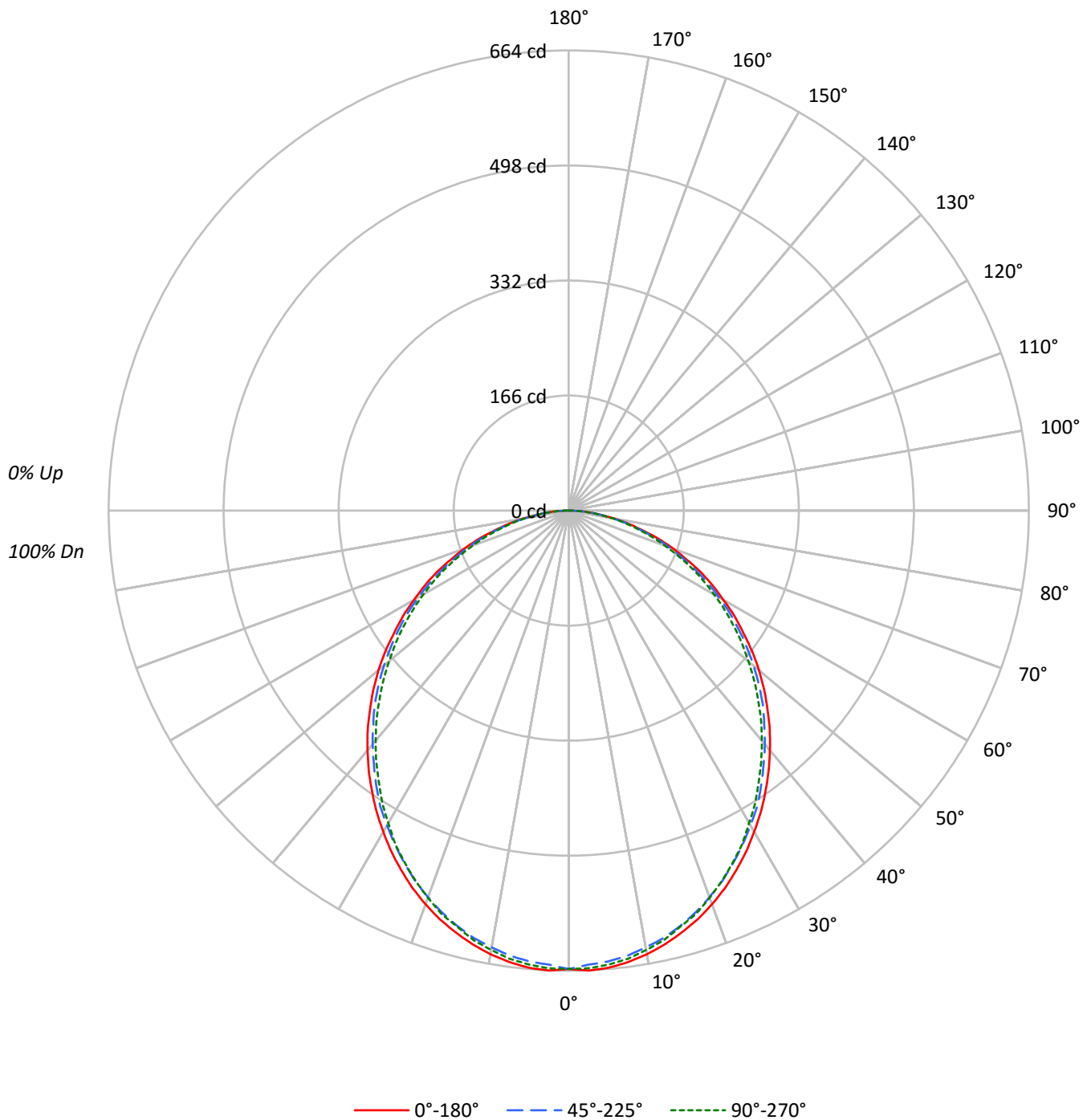
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	95	98	94	92		94	91	89		84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		59
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		44
6	71	57	49	42	69	56	48	42	55	47	42		53	46	41		39
7	66	52	43	37	64	51	43	37	50	42	37		48	42	37		34
8	61	48	39	33	60	47	39	33	46	38	33		44	38	33		31
9	57	44	36	30	56	43	35	30	42	35	30		41	34	30		28
10	54	40	33	27	52	40	32	27	39	32	27		38	32	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8018	8018	8018
5°	8056	7945	8000
10°	8002	7876	7925
15°	7908	7788	7802
20°	7799	7660	7667
25°	7653	7508	7494
30°	7491	7340	7285
35°	7323	7163	7070
40°	7146	6967	6858
45°	6953	6787	6620
50°	6757	6564	6381
55°	6503	6336	6143
60°	6247	6068	5874
65°	6020	5776	5596
70°	5685	5444	5203
75°	5194	5006	4796
80°	4684	4488	4446
85°	4117	3950	3797

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.4	3.6
10°-20°	176.1	10.2
20°-30°	260.1	15.1
30°-40°	303.7	17.6
40°-50°	305.4	17.7
50°-60°	268.3	15.6
60°-70°	199.8	11.6
70°-80°	113.7	6.6
80°-90°	32.3	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°	498.5	29.0
0°-40°	802.3	46.6
0°-60°	1375.9	79.9
0°-90°	1721.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1721.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	662	662	662	662	662	
5°	662	659	653	659	658	63
15°	630	628	621	625	622	178
25°	572	569	561	562	560	264
35°	495	491	484	481	478	310
45°	406	403	396	389	386	313
55°	308	307	300	294	291	276
65°	210	207	201	197	195	207
75°	111	109	107	104	102	118
85°	30	28	28	27	27	34
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	661.5	661.5	661.5	661.5	661.5
2.5°	664.4	662.1	655.8	661.5	661.0
5°	662.1	659.2	653.0	658.7	657.5
7.5°	657.0	654.1	647.9	653.0	652.4
10°	650.1	647.3	639.9	645.0	643.9
12.5°	641.0	638.8	631.9	635.4	634.8
15°	630.2	628.0	620.6	625.1	621.7
17.5°	618.3	615.4	608.1	611.5	610.3
20°	604.6	601.2	593.8	596.1	594.4
22.5°	589.3	585.9	578.5	580.2	577.9
25°	572.2	568.8	561.4	562.0	560.3
27.5°	554.6	551.2	543.2	543.8	542.1
30°	535.2	532.4	524.4	524.4	520.5
32.5°	515.9	511.9	506.2	502.3	500.6
35°	494.9	491.4	484.1	480.6	477.8
37.5°	473.8	469.3	461.9	457.9	456.2
40°	451.6	448.2	440.3	435.7	433.4
42.5°	429.4	425.5	417.5	413.0	410.7
45°	405.6	403.3	395.9	389.1	386.2
47.5°	382.2	378.8	372.0	365.2	362.9
50°	358.3	355.5	348.1	341.9	338.4
52.5°	333.3	331.6	323.7	318.5	315.1
55°	307.7	307.2	299.8	293.5	290.7
57.5°	283.8	281.6	275.9	270.2	266.8
60°	257.7	257.1	250.3	245.2	242.3
62.5°	234.3	232.6	225.8	220.7	219.0
65°	209.9	207.0	201.4	196.8	195.1
67.5°	183.7	181.4	176.9	172.9	170.6
70°	160.4	157.0	153.6	149.6	146.8
72.5°	135.9	133.7	129.7	126.3	125.1
75°	110.9	108.6	106.9	104.1	102.4
77.5°	88.7	87.6	85.3	83.0	83.0
80°	67.1	65.4	64.3	63.7	63.7
82.5°	46.1	46.1	46.1	44.9	44.4
85°	29.6	28.4	28.4	27.3	27.3
87.5°	14.8	13.1	12.5	11.9	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)