

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: P242526

Luminaire Tested: **S123RDR-S560D927-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242526
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-25)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123RDR-S560D927-X4F0-XX-UDD-F-W
Description: DEFINE 3 REGRESSED 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: 1584.5 lumens
Efficiency: N/A
Efficacy: 84.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.07 / 1.22
Luminous Opening: Rectangular (W 0.23' x L: 3.88' x H: 0')
CIE Type: Direct

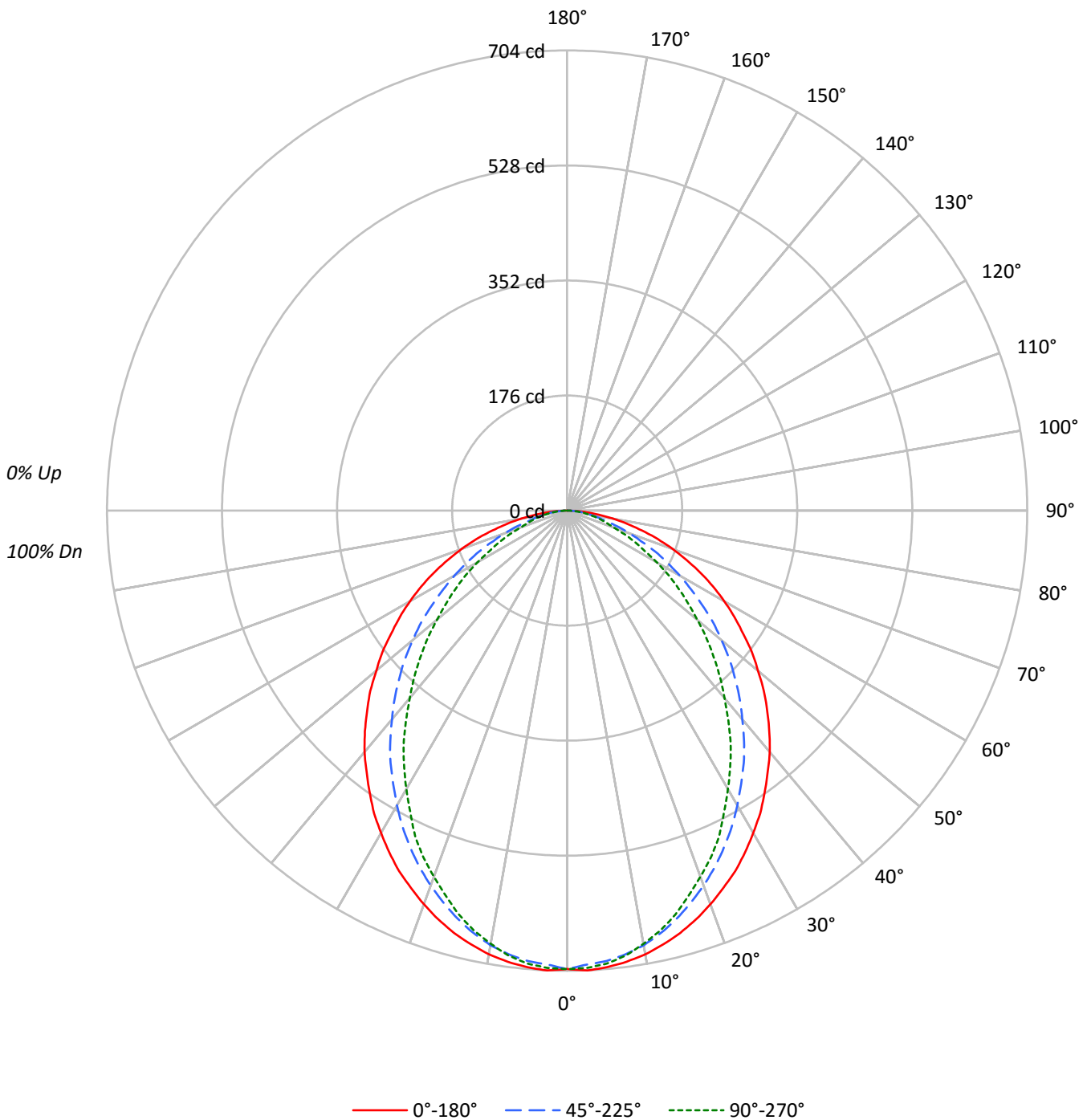
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88					86				
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75					73				
3	92	82	75	68	90	81	74	68	78	72	67	75	70	66	73	68	64					62				
4	85	73	65	59	83	72	64	58	70	63	58	67	62	57	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49					47				
6	73	60	51	45	71	59	51	45	57	50	45	55	49	44	54	48	44					42				
7	67	54	46	40	66	54	46	40	52	45	40	51	44	39	49	44	39					37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35					34				
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32					30				
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	34	29					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8501	8501	8501
5°	8533	8416	8465
10°	8485	8311	8282
15°	8394	8115	8030
20°	8268	7872	7689
25°	8140	7599	7356
30°	7970	7285	6886
35°	7794	6970	6456
40°	7631	6597	5923
45°	7421	6231	5441
50°	7187	5814	4901
55°	6948	5338	4400
60°	6730	4827	3847
65°	6445	4274	3295
70°	6089	3587	2662
75°	5568	2824	2506
80°	4963	2499	2304
85°	4186	2211	2058



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.9	4.2
10°-20°	183.4	11.6
20°-30°	264.1	16.7
30°-40°	297.4	18.8
40°-50°	284.5	18.0
50°-60°	232.9	14.7
60°-70°	157.0	9.9
70°-80°	78.7	5.0
80°-90°	20.6	1.3
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°	513.4	32.4
0°-40°	810.8	51.2
0°-60°	1328.1	83.8
0°-90°	1584.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1584.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	701	701	701	701	701	
5°	701	698	692	697	696	67
15°	669	663	647	644	640	188
25°	609	594	568	556	550	280
35°	527	506	471	446	436	330
45°	433	407	364	331	317	334
55°	329	301	253	220	208	295
65°	225	193	149	121	115	222
75°	119	92	60	55	54	127
85°	30	18	16	15	15	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	701.3	701.3	701.3	701.3	701.3
2.5°	704.2	701.9	695.1	701.3	700.2
5°	701.3	698.5	691.7	696.8	695.7
7.5°	696.2	693.4	684.8	688.3	686.6
10°	689.4	685.4	675.2	675.7	672.9
12.5°	679.7	675.2	662.1	661.5	658.1
15°	668.9	662.7	646.7	643.9	639.9
17.5°	655.8	649.0	629.1	623.4	617.7
20°	641.0	631.9	610.3	602.9	596.1
22.5°	624.6	613.7	590.4	580.8	574.5
25°	608.6	594.4	568.2	556.3	550.0
27.5°	589.3	573.9	545.5	529.6	519.9
30°	569.4	552.3	520.5	501.1	492.0
32.5°	549.5	529.6	495.4	473.8	464.1
35°	526.7	506.2	471.0	446.5	436.3
37.5°	504.0	481.8	444.8	417.5	405.0
40°	482.3	457.3	416.9	387.4	374.3
42.5°	457.9	432.9	390.8	357.8	346.4
45°	432.9	407.3	363.5	331.0	317.4
47.5°	408.4	380.0	336.7	301.5	289.5
50°	381.1	354.4	308.3	273.0	259.9
52.5°	356.6	327.1	281.6	244.6	233.2
55°	328.8	300.9	252.6	219.6	208.2
57.5°	303.7	273.6	224.7	193.4	183.7
60°	277.6	246.3	199.1	168.4	158.7
62.5°	251.4	220.1	172.9	144.5	134.2
65°	224.7	193.4	149.0	121.2	114.9
67.5°	197.9	166.1	122.9	101.8	95.0
70°	171.8	141.1	101.2	81.3	75.1
72.5°	145.6	115.5	80.2	64.8	63.1
75°	118.9	91.6	60.3	54.6	53.5
77.5°	94.4	69.4	47.2	43.8	42.7
80°	71.1	47.8	35.8	34.1	33.0
82.5°	48.9	29.6	25.6	23.9	23.9
85°	30.1	17.6	15.9	14.8	14.8
87.5°	13.7	7.4	7.4	6.8	6.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)