

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: P242531

Luminaire Tested: **S123RDR-S560D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242531
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-S560D830-X4F0-XX-UDD-F-W
Description: DEFINE 3 REGRESSED DIRECT RECESSED WITH SATIN FLUSH DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1885.2 lumens
Efficiency: N/A
Efficacy: 100.3 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

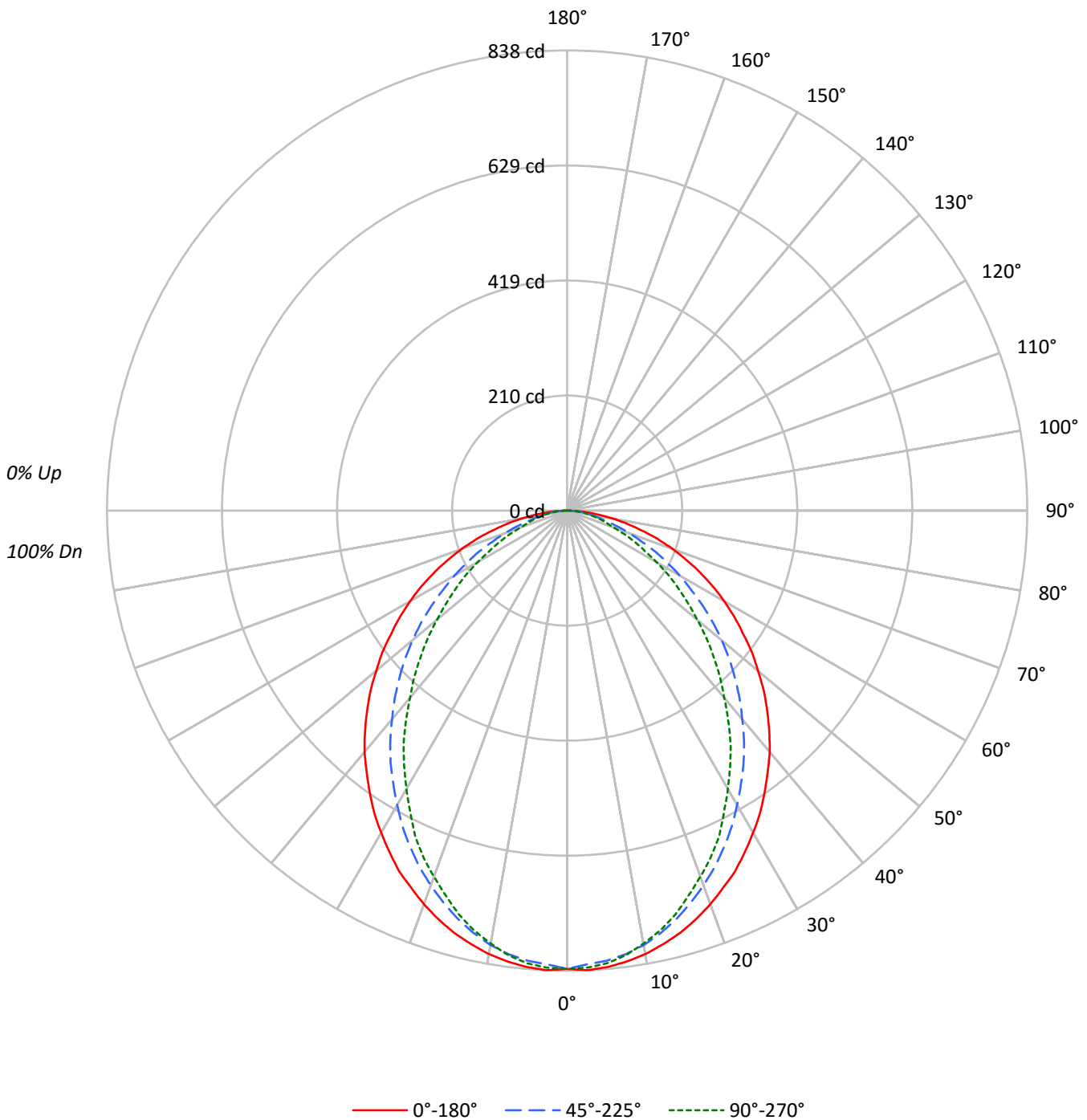
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	10115	10115	10115
5°	10154	10014	10071
10°	10095	9887	9854
15°	9988	9656	9555
20°	9838	9367	9149
25°	9684	9042	8752
30°	9481	8667	8193
35°	9273	8292	7681
40°	9081	7850	7046
45°	8828	7414	6473
50°	8550	6917	5833
55°	8267	6350	5235
60°	8007	5743	4577
65°	7667	5085	3921
70°	7244	4271	3165
75°	6622	3358	2979
80°	5905	2974	2743
85°	4993	2629	2448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	4.2
10°-20°	218.2	11.6
20°-30°	314.2	16.7
30°-40°	353.8	18.8
40°-50°	338.5	18.0
50°-60°	277.1	14.7
60°-70°	186.8	9.9
70°-80°	93.7	5.0
80°-90°	24.5	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°	610.9	32.4
0°-40°	964.7	51.2
0°-60°	1580.2	83.8
0°-90°	1885.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1885.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	834	831	823	829	828	79
15°	796	788	770	766	761	224
25°	724	707	676	662	654	333
35°	627	602	560	531	519	392
45°	515	485	432	394	378	397
55°	391	358	300	261	248	351
65°	267	230	177	144	137	265
75°	141	109	72	65	64	151
85°	36	21	19	18	18	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	834.5	834.5	834.5	834.5	834.5
2.5°	837.8	835.1	827.0	834.5	833.1
5°	834.5	831.1	823.0	829.0	827.7
7.5°	828.4	825.0	814.8	818.9	816.9
10°	820.2	815.5	803.3	804.0	800.6
12.5°	808.7	803.3	787.8	787.1	783.0
15°	795.9	788.4	769.5	766.1	761.4
17.5°	780.3	772.2	748.5	741.7	735.0
20°	762.7	751.9	726.2	717.4	709.3
22.5°	743.1	730.2	702.5	691.0	683.5
25°	724.1	707.2	676.1	661.9	654.4
27.5°	701.1	682.9	649.0	630.1	618.6
30°	677.4	657.1	619.2	596.2	585.4
32.5°	653.8	630.1	589.5	563.8	552.2
35°	626.7	602.3	560.4	531.3	519.1
37.5°	599.6	573.2	529.2	496.7	481.9
40°	573.9	544.1	496.1	460.9	445.3
42.5°	544.8	515.0	464.9	425.7	412.2
45°	515.0	484.6	432.5	393.9	377.6
47.5°	485.9	452.1	400.6	358.7	344.5
50°	453.4	421.6	366.8	324.9	309.3
52.5°	424.3	389.1	335.0	291.0	277.5
55°	391.2	358.0	300.5	261.2	247.7
57.5°	361.4	325.5	267.3	230.1	218.6
60°	330.3	293.0	236.9	200.3	188.8
62.5°	299.1	261.9	205.7	171.9	159.7
65°	267.3	230.1	177.3	144.2	136.7
67.5°	235.5	197.6	146.2	121.1	113.0
70°	204.4	167.8	120.5	96.8	89.3
72.5°	173.3	137.4	95.4	77.2	75.1
75°	141.4	109.0	71.7	65.0	63.6
77.5°	112.3	82.6	56.2	52.1	50.8
80°	84.6	56.8	42.6	40.6	39.3
82.5°	58.2	35.2	30.5	28.4	28.4
85°	35.9	21.0	18.9	17.6	17.6
87.5°	16.2	8.8	8.8	8.1	7.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)