

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: P242532

Luminaire Tested: **S123RDR-S775D830-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P242532
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-S775D830-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: 2625.5 lumens
Efficiency: N/A
Efficacy: 99.5 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

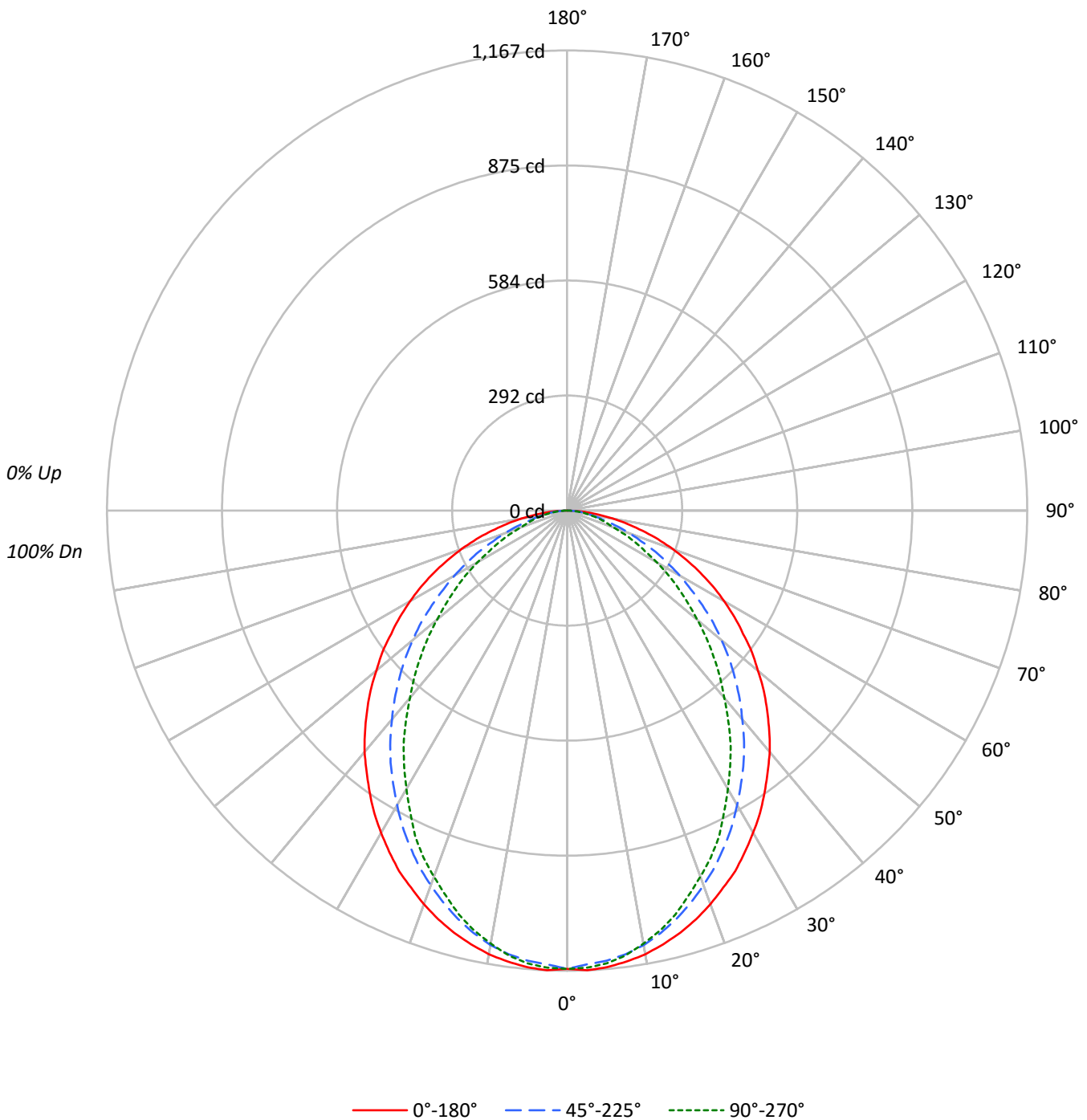
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	14087	14087	14087
5°	14141	13945	14026
10°	14061	13770	13724
15°	13909	13449	13307
20°	13701	13045	12742
25°	13488	12593	12189
30°	13206	12070	11411
35°	12915	11548	10697
40°	12647	10932	9814
45°	12296	10325	9015
50°	11908	9634	8122
55°	11513	8844	7291
60°	11152	7998	6376
65°	10678	7081	5461
70°	10086	5947	4409
75°	9226	4679	4149
80°	8223	4146	3818
85°	6954	3672	3407



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.3	4.2
10°-20°	303.9	11.6
20°-30°	437.6	16.7
30°-40°	492.8	18.8
40°-50°	471.4	18.0
50°-60°	385.9	14.7
60°-70°	260.2	9.9
70°-80°	130.5	5.0
80°-90°	34.1	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°	850.8	32.4
0°-40°	1343.5	51.2
0°-60°	2200.8	83.8
0°-90°	2625.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2625.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1162	1157	1146	1155	1153	110
15°	1108	1098	1072	1067	1060	312
25°	1008	985	942	922	911	464
35°	873	839	780	740	723	546
45°	717	675	602	549	526	554
55°	545	499	418	364	345	489
65°	372	320	247	201	190	368
75°	197	152	100	90	89	210
85°	50	29	26	24	24	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1162.2	1162.2	1162.2	1162.2	1162.2
2.5°	1166.9	1163.1	1151.8	1162.2	1160.3
5°	1162.2	1157.4	1146.1	1154.6	1152.7
7.5°	1153.7	1149.0	1134.8	1140.5	1137.7
10°	1142.4	1135.8	1118.8	1119.7	1115.0
12.5°	1126.3	1118.8	1097.1	1096.2	1090.5
15°	1108.4	1098.1	1071.7	1067.0	1060.4
17.5°	1086.8	1075.4	1042.5	1033.0	1023.6
20°	1062.2	1047.2	1011.3	999.1	987.8
22.5°	1034.9	1017.0	978.4	962.3	952.0
25°	1008.5	985.0	941.6	921.8	911.4
27.5°	976.5	951.0	903.9	877.5	861.5
30°	943.5	915.2	862.4	830.4	815.3
32.5°	910.5	877.5	821.0	785.1	769.1
35°	872.8	838.9	780.4	739.9	722.9
37.5°	835.1	798.3	737.1	691.8	671.1
40°	799.3	757.8	690.9	641.9	620.2
42.5°	758.7	717.3	647.5	592.9	574.0
45°	717.3	674.9	602.3	548.6	525.9
47.5°	676.7	629.6	558.0	499.5	479.8
50°	631.5	587.2	510.9	452.4	430.7
52.5°	591.0	542.0	466.6	405.3	386.4
55°	544.8	498.6	418.5	363.8	345.0
57.5°	503.3	453.4	372.3	320.5	304.4
60°	460.0	408.1	329.9	279.0	263.0
62.5°	416.6	364.8	286.5	239.4	222.4
65°	372.3	320.5	246.9	200.8	190.4
67.5°	328.0	275.2	203.6	168.7	157.4
70°	284.6	233.8	167.8	134.8	124.4
72.5°	241.3	191.3	132.9	107.4	104.6
75°	197.0	151.7	99.9	90.5	88.6
77.5°	156.5	115.0	78.2	72.6	70.7
80°	117.8	79.2	59.4	56.6	54.7
82.5°	81.1	49.0	42.4	39.6	39.6
85°	50.0	29.2	26.4	24.5	24.5
87.5°	22.6	12.3	12.3	11.3	10.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)