

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: G3-1802-639-49

Luminaire Tested: **S123DR-H775D835-X4F0-XX-UDD-F-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-49
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S123DR-H775D835-X4F0-XX-UDD-F-W
Description: DEFINE 3 DIRECT RECESSED WITH SATIN FLUSH DIFFUSER.
HIGH PERFORMANCE LIGHT ENGINE
Light Source: (184) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3208.9 lumens
Efficiency: N/A
Efficacy: 125.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.23' x L: 3.92' x H: 0')
CIE Type: Direct

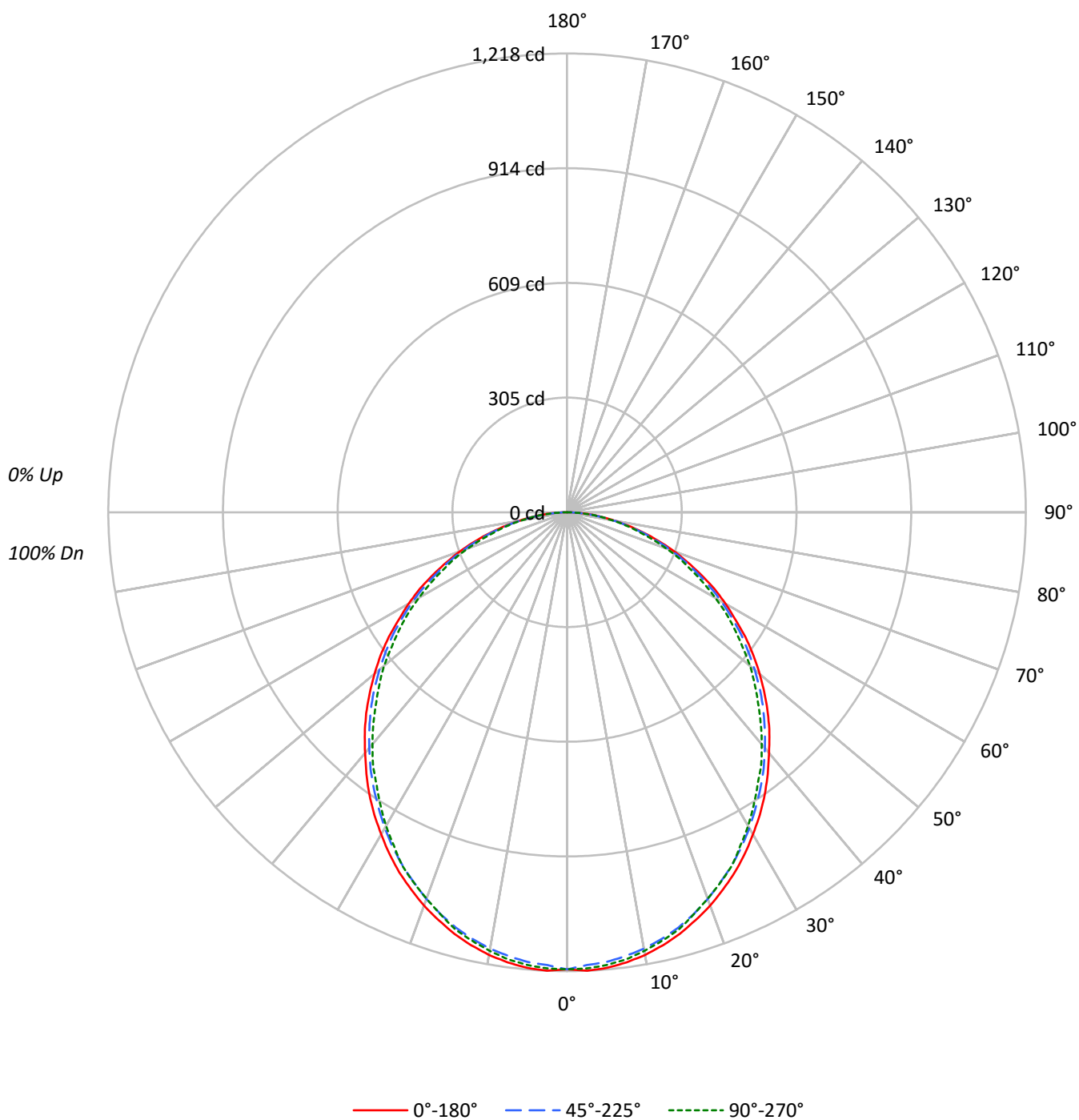
Input Watts (W): 25.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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		50	30	10
RCR																				
0	119	119	119	119	116	116	116	116		111	111	111		106	106	106		102	102	102
1	109	104	100	96	106	102	98	94		97	94	91		94	91	89		90	88	86
2	99	91	84	78	96	89	83	77		85	80	76		82	78	74		79	75	72
3	90	80	72	65	88	78	71	65		75	69	64		73	67	62		70	65	61
4	83	71	62	55	80	70	61	55		67	60	54		65	59	54		63	57	53
5	76	63	54	48	74	62	54	48		60	53	47		58	52	47		56	51	46
6	70	57	48	42	69	56	48	42		54	47	41		53	46	41		51	45	41
7	65	52	43	37	64	51	43	37		50	42	37		48	41	36		47	41	36
8	61	47	39	33	59	47	39	33		45	38	33		44	37	33		43	37	32
9	57	44	35	30	56	43	35	30		42	35	30		41	34	29		40	34	29
10	53	40	32	27	52	40	32	27		39	32	27		38	31	27		37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14547	14547	14547
5°	14614	14422	14518
10°	14527	14320	14394
15°	14377	14166	14228
20°	14178	13936	13923
25°	13947	13682	13695
30°	13667	13404	13307
35°	13395	13103	12912
40°	13056	12790	12586
45°	12788	12482	12160
50°	12444	12127	11828
55°	12085	11771	11374
60°	11656	11345	10889
65°	11152	10811	10357
70°	10589	10238	9818
75°	9823	9545	9035
80°	8840	8633	8356
85°	8256	7843	7568

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.6
10°-20°	323.6	10.1
20°-30°	479.1	14.9
30°-40°	561.9	17.5
40°-50°	568.1	17.7
50°-60°	502.4	15.7
60°-70°	377.3	11.8
70°-80°	217.5	6.8
80°-90°	64.5	2.0
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°	917.2	28.6
0°-40°	1479.1	46.1
0°-60°	2549.6	79.5
0°-90°	3208.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3208.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1213	1213	1213	1213	1213	
5°	1214	1209	1198	1208	1206	115
15°	1158	1152	1141	1149	1146	326
25°	1054	1046	1034	1039	1035	485
35°	915	907	895	892	882	572
45°	754	748	736	726	717	581
55°	578	574	563	552	544	516
65°	393	390	381	371	365	389
75°	212	210	206	200	195	225
85°	60	59	57	56	55	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1213	1213	1213	1213	1213
2.5°	1218	1214	1203	1214	1212
5°	1214	1209	1198	1208	1206
7.5°	1205	1200	1188	1199	1197
10°	1193	1188	1176	1185	1182
12.5°	1177	1172	1160	1167	1165
15°	1158	1152	1141	1149	1146
17.5°	1135	1130	1118	1128	1119
20°	1111	1106	1092	1101	1091
22.5°	1083	1077	1063	1069	1064
25°	1054	1046	1034	1039	1035
27.5°	1022	1014	1002	1004	997
30°	987	980	968	970	961
32.5°	952	946	931	931	922
35°	915	907	895	892	882
37.5°	875	868	857	852	846
40°	834	830	817	811	804
42.5°	795	788	777	769	761
45°	754	748	736	726	717
47.5°	711	706	694	683	676
50°	667	663	650	638	634
52.5°	624	619	606	595	587
55°	578	574	563	552	544
57.5°	529	529	517	507	501
60°	486	481	473	462	454
62.5°	441	438	427	416	410
65°	393	390	381	371	365
67.5°	346	345	337	329	325
70°	302	300	292	284	280
72.5°	257	255	248	241	236
75°	212	210	206	200	195
77.5°	168	168	163	161	159
80°	128	127	125	123	121
82.5°	92	91	89	88	88
85°	60	59	57	56	55
87.5°	31	29	28	26	25
90°	0	0	0	0	0

(END OF REPORT)