

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: G3-1802-639-16

Luminaire Tested: **S124DR-S795D835-X4F0-XX-UDD-D-W**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: G3-1802-639-16
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DR-S795D835-X4F0-XX-UDD-D-W
Description: DEFINE 4 DIRECT RECESSED WITH SATIN DROP DIFFUSER
STANDARD LIGHT ENGINE
Light Source: (92) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3044.6 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.28 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 0.31' x L: 3.88' x H: 0.08')
CIE Type: Direct

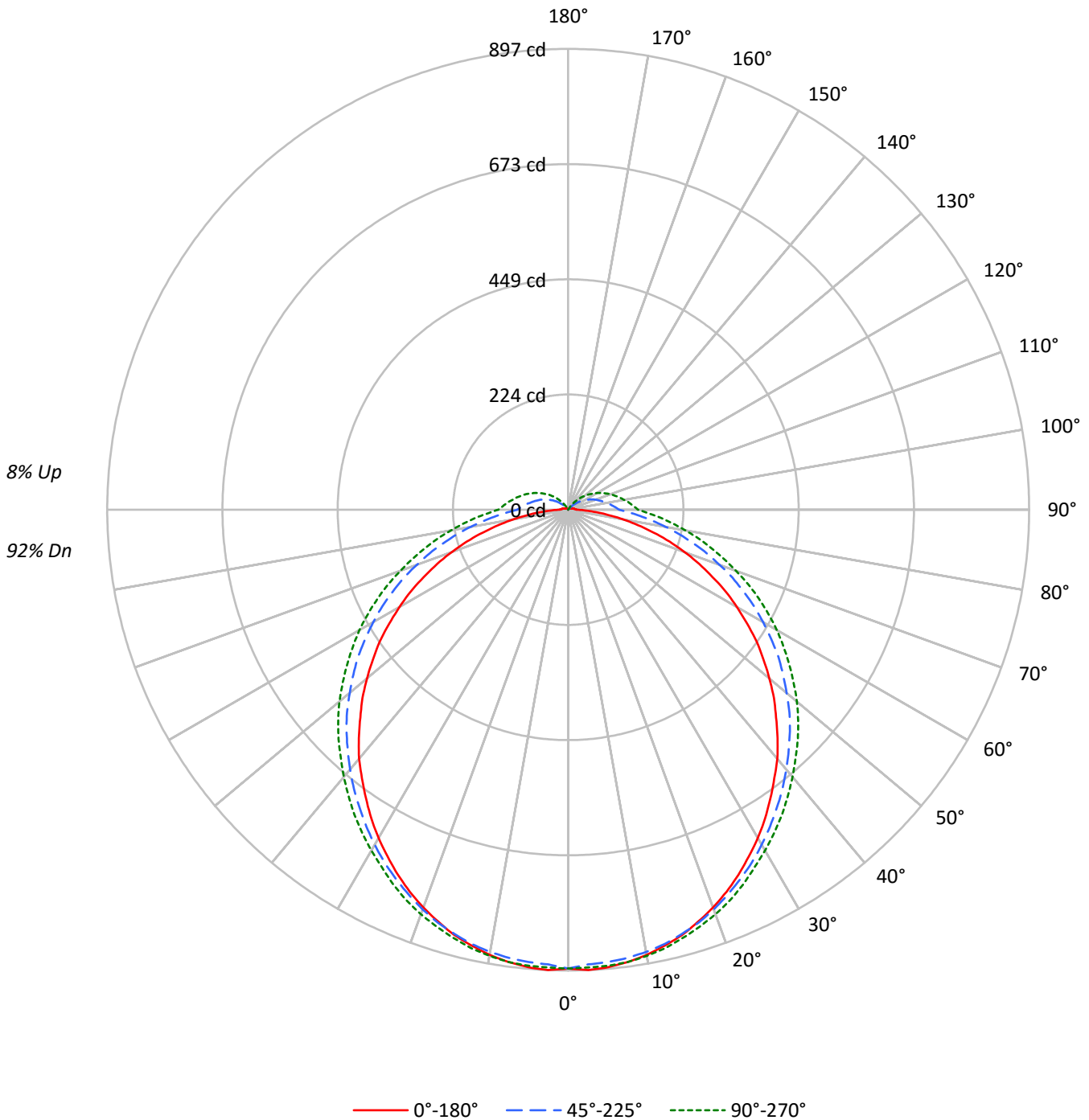
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92					92			
1	105	100	95	91	102	97	93	89	91	88	84	86	83	80	81	79	77	74					74			
2	95	86	79	73	92	84	77	71	79	73	68	74	70	66	70	67	63	60					60			
3	87	75	67	60	83	73	65	59	69	62	57	65	60	55	62	57	53	50					50			
4	79	66	57	50	76	65	56	49	61	54	48	58	52	47	55	49	45	43					43			
5	73	59	50	43	70	58	49	42	55	47	41	52	45	40	49	44	39	37					37			
6	67	53	44	37	64	52	43	37	49	42	36	47	40	35	45	39	34	32					32			
7	62	48	39	33	60	47	38	32	45	37	32	43	36	31	41	35	30	28					28			
8	58	44	35	29	56	43	35	29	41	33	28	39	32	28	37	31	27	25					25			
9	54	40	32	26	52	39	31	26	38	30	25	36	29	25	34	29	24	22					22			
10	50	37	29	24	49	36	29	23	35	28	23	33	27	23	32	26	22	20					20			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7938	7938	7938
5°	7962	7750	7769
10°	7913	7615	7603
15°	7841	7461	7412
20°	7734	7292	7226
25°	7613	7103	7022
30°	7482	6915	6813
35°	7334	6723	6629
40°	7215	6540	6438
45°	7039	6370	6272
50°	6890	6175	6097
55°	6736	5990	5892
60°	6496	5755	5704
65°	6233	5504	5473
70°	5914	5215	5205
75°	5468	4897	4958
80°	4973	4583	4707
85°	4339	4289	4535



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	84.6	2.8
10°-20°	242.4	8.0
20°-30°	366.6	12.0
30°-40°	443.5	14.6
40°-50°	468.8	15.4
50°-60°	441.2	14.5
60°-70°	366.1	12.0
70°-80°	256.9	8.4
80°-90°	144.9	4.8
90°-100°	86.2	2.8
100°-110°	63.9	2.1
110°-120°	42.9	1.4
120°-130°	24.1	0.8
130°-140°	10.4	0.3
140°-150°	2.1	0.1
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	693.6	22.8
0°-40°	1137.1	37.3
0°-60°	2047.1	67.2
0°-90°	2815.0	92.5
90°-120°	192.9	6.3
90°-150°	229.6	7.5
90°-180°	230.0	7.6
0°-180°	3044.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	893	893	893	893	893	
5°	894	891	884	892	891	85
15°	857	858	855	864	863	241
25°	784	790	793	804	805	361
35°	686	698	708	722	725	430
45°	572	591	610	627	632	442
55°	448	469	499	519	525	399
65°	310	342	376	401	409	307
75°	172	209	251	279	288	183
85°	53	95	140	170	180	55
90°	16	56	99	128	136	11
95°	13	46	87	114	123	10
105°	9	29	66	91	99	10
115°	6	15	47	69	76	6
125°	4	3	28	47	53	4
135°	2	2	9	25	31	2
145°	1	0	0	6	10	1
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	893	893	893	893	893
2.5°	897	894	886	893	892
5°	894	891	884	892	891
7.5°	888	886	880	889	888
10°	880	879	874	883	882
12.5°	869	869	866	874	874
15°	857	858	855	864	863
17.5°	841	844	843	852	851
20°	824	827	828	838	838
22.5°	805	809	811	821	823
25°	784	790	793	804	805
27.5°	761	770	774	784	785
30°	738	746	753	764	766
32.5°	713	723	731	744	746
35°	686	698	708	722	725
37.5°	659	673	685	699	702
40°	633	646	660	675	679
42.5°	603	618	635	652	655
45°	572	591	610	627	632
47.5°	543	562	584	601	607
50°	511	533	555	575	581
52.5°	479	501	527	547	553
55°	448	469	499	519	525
57.5°	413	439	468	492	497
60°	379	405	438	461	469
62.5°	346	375	408	431	439
65°	310	342	376	401	409
67.5°	276	310	346	371	379
70°	241	275	313	340	347
72.5°	207	242	283	309	317
75°	172	209	251	279	288
77.5°	139	178	222	250	260
80°	109	149	193	223	231
82.5°	79	121	165	196	205
85°	53	95	140	170	180
87.5°	33	74	118	147	156
90°	16	56	99	128	136
92.5°	15	50	93	121	129
95°	13	46	87	114	123
97.5°	12	41	82	108	117
100°	11	37	76	103	110
102.5°	11	33	71	97	105
105°	9	29	66	91	99
107.5°	9	26	61	86	93
110°	8	22	57	80	88



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	7	19	52	74	82
115°	6	15	47	69	76
117.5°	6	12	42	63	71
120°	5	8	37	57	65
122.5°	5	5	32	52	59
125°	4	3	28	47	53
127.5°	4	3	23	41	48
130°	3	2	18	36	42
132.5°	3	2	14	31	37
135°	2	2	9	25	31
137.5°	2	1	5	20	25
140°	2	1	2	15	20
142.5°	1	1	0	11	15
145°	1	0	0	6	10
147.5°	1	0	0	1	5
150°	1	0	0	0	0
152.5°	0	0	0	0	0
155°	0	0	0	0	0
157.5°	0	0	0	0	0
160°	0	0	0	0	0
162.5°	0	0	0	0	0
165°	0	0	0	0	0
167.5°	0	0	0	0	0
170°	0	0	0	0	0
172.5°	0	0	0	0	0
175°	0	0	0	0	0
177.5°	0	0	0	0	0
180°	0	0	0	0	0

(END OF REPORT)