

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: SHAPER

Report Number: ITL90337-GONIOPHOTOMETRY

Luminaire Tested: **1800-X-90-L30-1-W-UNV-STD-X-X**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: ITL90337-GONIOPHOTOMETRY
Test Lab: INDEPENDENT TESTING LABORATORIES, INC.
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 1800-X-90-L30-1-W-UNV-STD-X-X
Description: SHAPER 1800 SERIES LED PENDANT DIRECT DOWNLIGHT
WIDE DISTRIBUTION
Light Source: (168) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

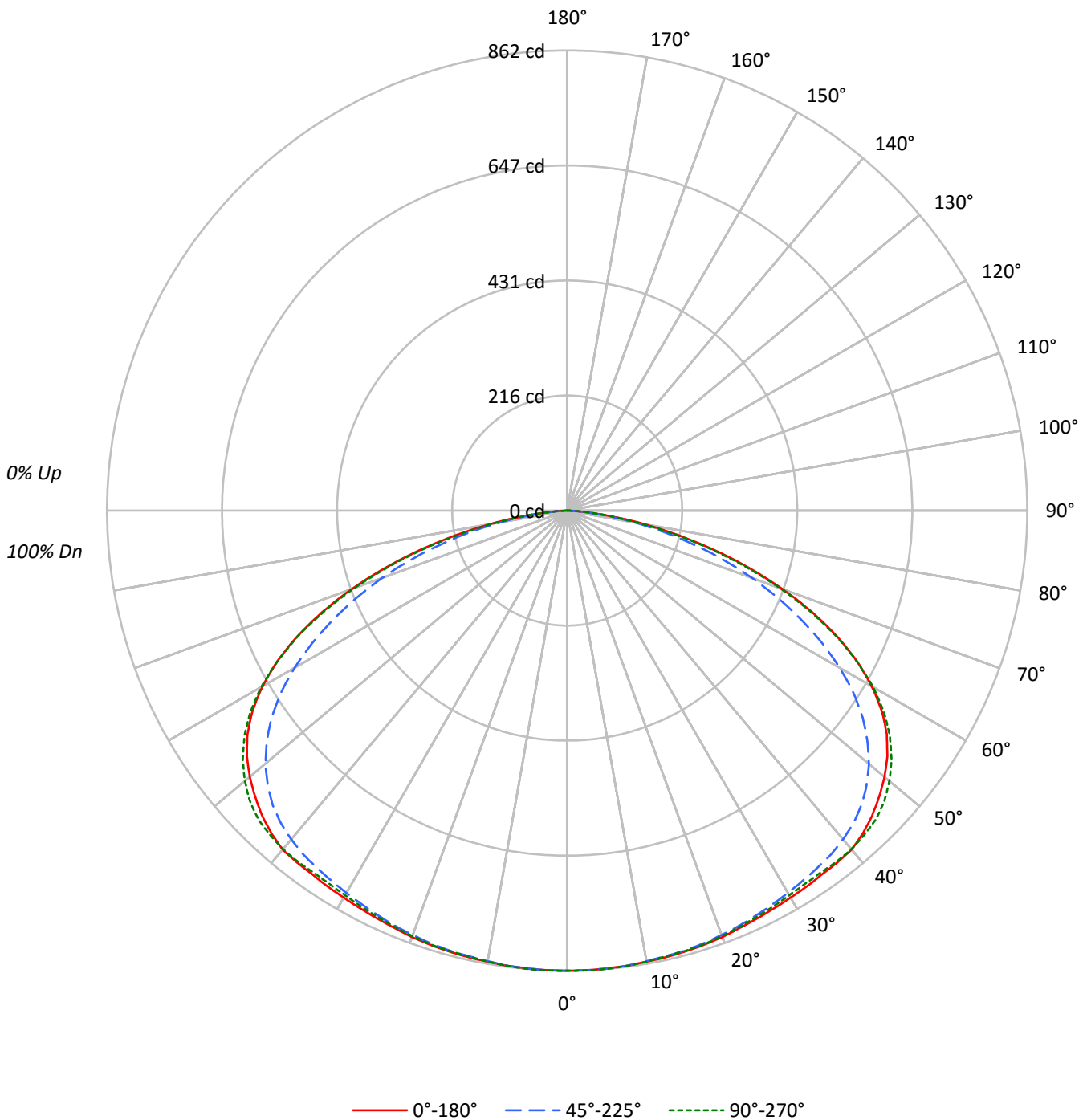
Lumens per Lamp: N/A
Luminaire Lumens: 3314.2 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 1.48 / 1.48 / 1.61
Luminous Opening: Circular (Dia: 1.17' x H: 0')
CIE Type: Direct

Input Watts (W): 41.8
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				10	0
RW	70	50	30	10	70	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
1	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	61	85	75	67	60	72	65	59	69	63	58	67	62	57	55
4	80	67	58	51	78	66	57	50	63	56	49	61	54	49	59	53	48	46
5	73	59	50	43	71	58	49	43	56	48	42	54	47	42	52	46	41	39
6	67	53	44	37	65	52	43	37	50	42	36	48	41	36	47	40	35	33
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29
8	57	43	34	28	56	43	34	28	41	33	28	40	33	28	39	32	27	25
9	53	39	31	25	52	39	31	25	38	30	25	37	30	25	35	29	24	23
10	50	36	28	22	49	36	28	22	35	27	22	34	27	22	33	27	22	20

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8679	8679	8679
5°	8703	8703	8713
10°	8772	8762	8772
15°	8913	8892	8902
20°	9108	9065	9086
25°	9366	9299	9332
30°	9732	9615	9673
35°	10227	10043	10178
40°	10897	10568	10883
45°	11506	11107	11648
50°	12156	11560	12344
55°	12833	11867	12955
60°	13271	11881	13331
65°	13295	11531	13247
70°	12630	10834	12482
75°	11088	9531	10815
80°	8524	7364	8234
85°	4506	3697	4275



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.1	2.5
10°-20°	241.7	7.3
20°-30°	388.2	11.7
30°-40°	517.4	15.6
40°-50°	614.1	18.5
50°-60°	627.7	18.9
60°-70°	511.8	15.4
70°-80°	279.2	8.4
80°-90°	52.0	1.6
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°	712.0	21.5
0°-40°	1229.4	37.1
0°-60°	2471.2	74.6
0°-90°	3314.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3314.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	862	862	862	862	862	
5°	861	861	861	861	862	82
15°	855	854	853	853	854	242
25°	843	840	837	839	840	390
35°	832	826	817	823	828	523
45°	808	794	780	801	818	624
55°	731	703	676	709	738	650
65°	558	521	484	520	556	547
75°	285	264	245	264	278	302
85°	39	37	32	36	37	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	862	862	862	862	862
2.5°	862	862	862	862	862
5°	861	861	861	861	862
7.5°	860	860	860	860	860
10°	858	858	857	857	858
12.5°	857	856	855	855	855
15°	855	854	853	853	854
17.5°	853	851	850	850	852
20°	850	847	846	847	848
22.5°	846	844	842	843	844
25°	843	840	837	839	840
27.5°	840	836	832	834	836
30°	837	832	827	829	832
32.5°	835	829	822	826	829
35°	832	826	817	823	828
37.5°	831	822	812	820	829
40°	829	816	804	817	828
42.5°	820	807	794	810	824
45°	808	794	780	801	818
47.5°	793	778	761	786	806
50°	776	757	738	765	788
52.5°	756	732	709	740	766
55°	731	703	676	709	738
57.5°	699	668	636	672	704
60°	659	626	590	627	662
62.5°	613	576	539	578	612
65°	558	521	484	520	556
67.5°	496	460	427	459	492
70°	429	397	368	395	424
72.5°	358	331	307	330	351
75°	285	264	245	264	278
77.5°	214	198	185	200	208
80°	147	137	127	138	142
82.5°	87	83	75	82	84
85°	39	37	32	36	37
87.5°	7	6	5	6	7
90°	0	0	0	0	0

(END OF REPORT)