

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: HALO COMMERCIAL

Report Number: P31124

Luminaire Tested: **PD6V142E-60VC_42TTT**

Issue Date: 03/03/2020



Test Information

Test Method: LM-79-08
Report Number: P31124
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PD6V142E-60VC_42TTT
Description: HALO 6 INCH RECESSED CFL OPEN DOWNLIGHT
VERTICAL LAMP, SPECULAR CLEAR REFLECTOR
Light Source: (1) FOUR PIN GX24Q_4 BASE HEX TTT CFL LAMP 2700K
SYLVANIA CF42DT/E/IN/827 42 W
Ballast/Driver: (1) SYLVANIA ELECTRONIC BALLAST
QTP2X26CF/UNV-BS

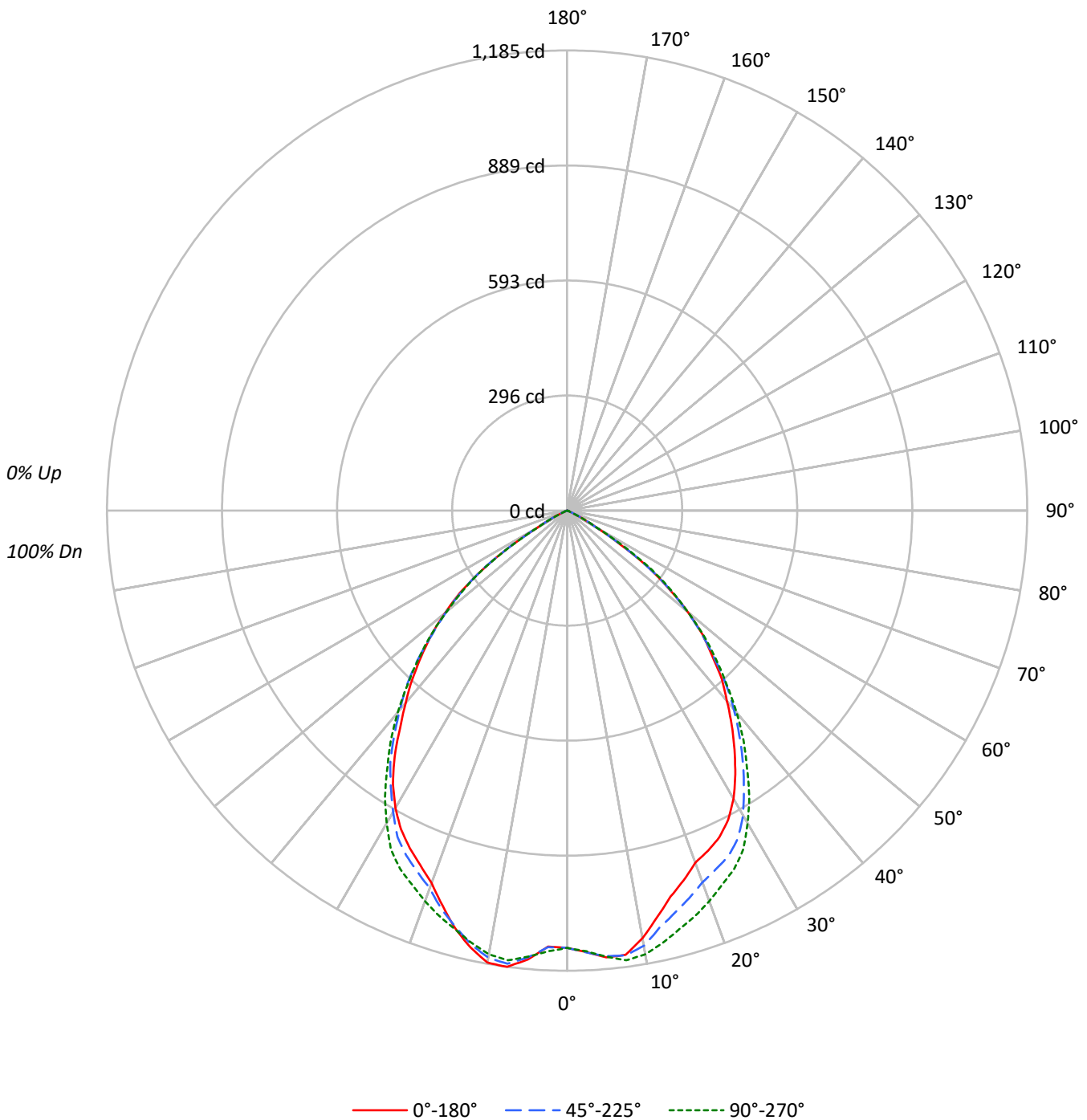
Summary

Lumens per Lamp: 3200 (1 lamp)
Luminaire Lumens: 2032.3 lumens
Efficiency: 63.5%
Efficacy: 47.3 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.21 / 1.22
Luminous Opening: Vertical Cylinder (Dia: 0.5' x H: 0.1')
CIE Type: Direct

Input Watts (W): 43
Input Voltage (V): NR
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

TEST NUMBER: P31124
CATALOG NUMBER: PD6V142E-60VC_42TTT

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	0	
RCR																						
0	76	76	76	76	74	74	74	74	71	71	71	68	68	68	65	65	65	64				
1	71	69	67	65	70	68	66	64	65	64	62	63	62	60	60	60	59	58				
2	66	63	59	57	65	61	59	56	59	57	55	57	55	54	56	54	53	51				
3	62	57	53	50	61	56	52	49	54	51	48	52	50	48	51	49	47	46				
4	58	52	47	44	56	51	47	44	49	46	43	48	45	42	47	44	42	41				
5	54	47	42	39	53	46	42	39	45	41	38	44	41	38	43	40	38	36				
6	50	43	38	35	49	42	38	35	41	37	34	40	37	34	39	36	34	33				
7	47	39	35	31	46	39	35	31	38	34	31	37	34	31	36	33	31	30				
8	44	36	32	28	43	36	32	28	35	31	28	34	31	28	34	30	28	27				
9	41	34	29	26	40	33	29	26	33	29	26	32	28	26	31	28	26	25				
10	39	31	27	24	38	31	27	24	30	26	24	30	26	24	29	26	24	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	61728	61728	61728
5°	62174	62066	62443
10°	59560	61798	62970
15°	54670	59292	59186
20°	51521	57127	54511
25°	50174	55040	51850
30°	47295	51269	48785
35°	42654	45834	44017
40°	37737	40036	38149
45°	32564	33491	32812
50°	26433	26499	26891
55°	18012	18713	18783
60°	6619	6924	6924
65°	1678	1342	1678
70°	472	377	472
75°	326	217	217
80°	129	129	129
85°	0	0	0



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp		0°	45°	90°	135°	180°	Flux
0°-10°	110.2	5.4	3.4	0°	1126	1126	1126	1126	1126	
10°-20°	307.9	15.1	9.6	5°	1155	1152	1153	1155	1160	109
20°-30°	449.9	22.1	14.1	15°	1029	1072	1116	1110	1114	291
30°-40°	491.6	24.2	15.4	25°	928	982	1018	980	959	425
40°-50°	413.7	20.4	12.9	35°	751	789	807	794	775	469
50°-60°	226.2	11.1	7.1	45°	527	535	542	545	531	406
60°-70°	29.6	1.5	0.9	55°	257	256	267	273	268	220
70°-80°	2.7	0.1	0.1	65°	20	19	16	19	20	30
80°-90°	0.4	0.0	0.0	75°	3	3	2	2	2	3
90°-100°	0.0	0.0	0.0	85°	0	0	0	0	0	0
100°-110°	0.0	0.0	0.0	90°	0	0	0	0	0	
110°-120°	0.0	0.0	0.0							
120°-130°	0.0	0.0	0.0							
130°-140°	0.0	0.0	0.0							
140°-150°	0.0	0.0	0.0							
150°-160°	0.0	0.0	0.0							
160°-170°	0.0	0.0	0.0							
170°-180°	0.0	0.0	0.0							
0°-30°	868.0	42.7	27.1							
0°-40°	1359.6	66.9	42.5							
0°-60°	1999.5	98.4	62.5							
0°-90°	2032.3	100.0	63.5							
90°-120°	0.0	0.0	0.0							
90°-150°	0.0	0.0	0.0							
90°-180°	0.0	0.0	0.0							
0°-180°	2032.3	100.0	63.5							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	1126	1126	1126	1126	1126	1126	1126	1126	1126
2.5°	1138	1134	1139	1138	1136	1130	1125	1125	1124
5°	1155	1148	1152	1157	1153	1150	1155	1154	1160
7.5°	1154	1152	1155	1164	1168	1167	1177	1179	1185
10°	1118	1132	1138	1141	1160	1158	1169	1182	1182
12.5°	1072	1098	1100	1104	1140	1131	1144	1170	1152
15°	1029	1063	1072	1063	1116	1093	1110	1141	1114
17.5°	998	1039	1046	1035	1095	1062	1076	1110	1067
20°	965	1018	1019	1001	1070	1027	1035	1078	1021
22.5°	948	1000	1000	975	1043	999	1007	1049	988
25°	928	980	982	952	1018	970	980	1026	959
27.5°	898	953	952	923	983	939	947	988	926
30°	857	905	906	871	929	892	896	941	884
32.5°	806	855	847	819	873	843	845	879	835
35°	751	788	789	762	807	793	794	821	775
37.5°	696	727	728	708	746	723	732	762	707
40°	640	663	668	647	679	660	670	689	647
42.5°	590	601	605	595	609	598	613	625	591
45°	527	538	535	534	542	532	545	556	531
47.5°	473	466	471	476	478	465	471	484	474
50°	404	398	402	405	405	398	406	412	411
52.5°	331	328	332	343	338	334	341	345	348
55°	257	249	256	265	267	264	273	270	268
57.5°	162	161	164	173	179	170	182	180	182
60°	87	88	86	91	91	91	92	95	91
62.5°	48	50	51	50	50	49	50	49	51
65°	20	16	19	18	16	17	19	19	20
67.5°	7	7	6	6	6	6	6	7	7
70°	5	5	5	5	4	4	4	5	5
72.5°	3	4	3	3	3	3	3	3	3
75°	3	3	3	2	2	2	2	2	2
77.5°	2	2	2	2	2	2	2	2	2
80°	1	1	1	1	1	1	1	1	1
82.5°	1	1	1	1	1	1	1	1	1
85°	0	0	0	0	0	0	0	0	0
87.5°	0	0	0	0	0	0	0	0	0
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)