



1961 McGaw Ave, Irvine, CA 92614  
 phone: 949.442.1601  
 email: info@tempolc.com

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HLS HOUSE LIGHT.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] 3798  
 [TESTLAB] Tempo LLC  
 [ISSUEDATE] 6/27/2019 2:07:44 PM  
 [MANUFAC] Tempo LLC  
 [LUMCAT] HLS House Light  
 [LUMINAIRE] Aluminum housing with lightly frosted lens  
 [LAMP] Twenty-One (21) white LEDs (2700K) with diffuse film  
 [\_ELECTRICALS] 23.92 VDC, 0.40 A, 1.00 PF

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	855
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	90
Total Luminaire Watts	9.48
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.12
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.11 ft
Luminous Width (90-270)	1.00 ft
Luminous Height	0.04 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	21893	20075	19159
55	18475	15895	16218
65	12849	11556	15006
75	6333	7873	13159
85	3754	5449	8664

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HLS HOUSE LIGHT.IES**

**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0.0</b>	333.11	333.11	333.11	333.11	333.11	333.11	333.11	333.11	333.11	333.11
<b>2.5</b>	333.58	333.02	332.46	332.78	333.09	333.12	333.14	333.02	332.89	332.76
<b>5.0</b>	332.43	331.95	331.46	331.69	331.91	331.93	331.95	331.75	331.54	331.40
<b>7.5</b>	331.11	330.48	329.85	330.03	330.21	330.16	330.11	329.83	329.53	329.17
<b>10.0</b>	328.95	328.32	327.69	327.87	328.05	327.81	327.56	327.16	326.75	326.23
<b>12.5</b>	326.38	325.67	324.95	324.93	324.91	324.57	324.22	323.70	323.18	322.55
<b>15.0</b>	322.91	322.14	321.36	321.30	321.23	320.73	320.23	319.50	318.76	317.88
<b>17.5</b>	318.90	317.94	316.98	316.76	316.53	315.96	315.39	314.38	313.36	312.28
<b>20.0</b>	313.97	313.07	312.17	311.74	311.30	310.47	309.64	308.52	307.40	305.90
<b>22.5</b>	308.34	307.48	306.62	306.05	305.48	304.43	303.39	301.87	300.34	298.42
<b>25.0</b>	302.09	301.18	300.28	299.62	298.95	297.65	296.35	294.36	292.36	290.10
<b>27.5</b>	294.81	293.93	293.04	292.30	291.56	290.02	288.47	286.20	283.92	281.04
<b>30.0</b>	286.93	286.07	285.20	284.28	283.36	281.63	279.89	277.16	274.43	270.96
<b>32.5</b>	278.29	277.37	276.45	275.38	274.30	272.36	270.41	267.32	264.24	260.14
<b>35.0</b>	268.90	267.92	266.93	265.81	264.68	262.43	260.19	256.61	253.03	248.32
<b>37.5</b>	259.05	258.02	256.99	255.63	254.28	251.72	249.15	245.11	241.06	235.77
<b>40.0</b>	248.19	247.25	246.30	244.75	243.21	240.38	237.55	233.00	228.45	222.53
<b>42.5</b>	236.94	235.93	234.91	233.25	231.58	228.45	225.31	220.31	215.30	208.76
<b>45.0</b>	224.96	223.99	223.02	221.20	219.38	215.95	212.52	207.10	201.67	194.62
<b>47.5</b>	212.55	211.52	210.48	208.54	206.59	202.85	199.10	193.36	187.62	180.22
<b>50.0</b>	199.44	198.40	197.37	195.30	193.21	189.23	185.23	179.26	173.27	165.72
<b>52.5</b>	185.93	184.77	183.60	181.41	179.22	175.10	170.98	164.82	158.65	151.24
<b>55.0</b>	171.57	170.34	169.11	166.84	164.57	160.35	156.12	149.98	143.84	136.92
<b>57.5</b>	156.13	154.98	153.82	151.48	149.14	144.96	140.77	134.96	129.15	123.01
<b>60.0</b>	139.70	138.53	137.36	135.17	132.97	129.02	125.07	119.81	114.55	109.41
<b>62.5</b>	121.75	120.77	119.80	117.87	115.94	112.59	109.23	104.88	100.52	96.41
<b>65.0</b>	102.99	102.31	101.62	100.32	99.01	96.40	93.79	90.43	87.06	84.03
<b>67.5</b>	85.03	84.58	84.12	83.41	82.68	80.89	79.11	76.78	74.45	72.50
<b>70.0</b>	68.93	68.70	68.46	68.25	68.02	66.97	65.91	64.54	63.17	62.08
<b>72.5</b>	53.32	53.47	53.62	54.05	54.47	54.47	54.47	53.98	53.49	52.94
<b>75.0</b>	41.17	41.42	41.66	42.32	42.97	43.52	44.06	44.51	44.96	44.94
<b>77.5</b>	32.31	32.60	32.89	33.54	34.20	34.87	35.54	36.23	36.91	37.54
<b>80.0</b>	25.89	26.14	26.39	27.04	27.68	28.34	28.99	29.66	30.33	31.05
<b>82.5</b>	21.22	21.42	21.60	22.10	22.59	23.25	23.90	24.57	25.23	25.85
<b>85.0</b>	17.98	18.15	18.31	18.59	18.86	19.36	19.85	20.47	21.08	21.64
<b>87.5</b>	15.73	15.83	15.92	16.08	16.25	16.51	16.77	17.22	17.67	18.11
<b>90.0</b>	14.06	14.08	14.09	14.16	14.22	14.35	14.48	14.73	14.97	15.25
<b>100.0</b>	9.25	9.21	9.17	9.04	8.91	8.75	8.58	8.43	8.27	8.05
<b>110.0</b>	6.21	6.13	6.06	5.96	5.85	5.67	5.48	5.22	4.96	4.55
<b>120.0</b>	3.52	3.49	3.45	3.32	3.18	2.96	2.74	2.50	2.26	2.12
<b>130.0</b>	1.68	1.67	1.66	1.62	1.57	1.49	1.41	1.36	1.31	1.32
<b>140.0</b>	0.79	0.78	0.77	0.77	0.77	0.77	0.77	0.80	0.82	0.86
<b>150.0</b>	0.46	0.47	0.48	0.49	0.50	0.51	0.53	0.55	0.57	0.58
<b>160.0</b>	0.33	0.33	0.32	0.33	0.34	0.34	0.34	0.35	0.36	0.36
<b>170.0</b>	0.17	0.17	0.17	0.18	0.18	0.17	0.17	0.17	0.17	0.18
<b>180.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Horizontal Angles**

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>
<b>0.0</b>	333.11	333.11	333.11	333.11	333.11	333.11	333.11	333.11	333.11
<b>2.5</b>	332.61	332.69	332.77	332.27	331.77	331.86	331.93	332.00	332.05
<b>5.0</b>	331.26	331.31	331.36	330.92	330.48	330.44	330.40	330.51	330.62
<b>7.5</b>	328.80	328.78	328.75	328.29	327.82	327.79	327.76	327.86	327.96

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HLS HOUSE LIGHT.IES**

**CANDELA TABULATION - (Cont.)**

10.0	325.70	325.52	325.34	324.65	323.96	323.92	323.88	323.92	323.97
12.5	321.90	321.43	320.96	320.11	319.25	319.11	318.97	318.94	318.90
15.0	316.99	316.28	315.55	314.51	313.47	313.14	312.80	312.69	312.58
17.5	311.19	310.16	309.13	307.80	306.47	305.91	305.34	305.22	305.09
20.0	304.40	303.02	301.64	299.88	298.12	297.35	296.58	296.35	296.13
22.5	296.50	294.76	293.02	290.86	288.69	287.53	286.36	286.07	285.78
25.0	287.85	285.46	283.08	280.47	277.87	276.34	274.81	274.39	273.97
27.5	278.15	275.11	272.07	268.96	265.84	263.86	261.87	261.17	260.46
30.0	267.49	263.76	260.03	256.23	252.44	250.02	247.61	246.80	245.98
32.5	256.04	251.46	246.87	242.42	237.95	235.04	232.12	231.12	230.11
35.0	243.60	238.33	233.05	227.84	222.61	219.25	215.89	214.67	213.45
37.5	230.47	224.46	218.45	212.62	206.78	203.01	199.23	197.88	196.53
40.0	216.60	209.93	203.24	196.93	190.60	186.67	182.73	181.32	179.90
42.5	202.22	195.08	187.93	181.35	174.75	170.80	166.84	165.53	164.23
45.0	187.58	180.19	172.79	166.31	159.83	156.22	152.62	151.51	150.39
47.5	172.81	165.38	157.95	151.93	145.91	142.99	140.06	138.88	137.71
50.0	158.16	151.06	143.95	138.43	132.90	130.24	127.58	126.71	125.84
52.5	143.82	137.34	130.85	125.79	120.72	118.63	116.54	115.69	114.85
55.0	130.00	124.16	118.31	114.00	109.68	108.11	106.54	105.78	105.03
57.5	116.86	111.72	106.58	103.18	99.77	98.53	97.28	96.74	96.19
60.0	104.26	100.00	95.74	93.22	90.69	89.71	88.73	88.42	88.11
62.5	92.29	89.11	85.93	84.05	82.17	81.49	80.80	80.72	80.63
65.0	81.00	78.87	76.74	75.36	73.97	73.60	73.22	73.42	73.62
67.5	70.55	69.28	68.01	67.00	65.99	65.81	65.63	65.93	66.24
70.0	60.99	60.37	59.75	59.03	58.31	57.98	57.65	57.78	57.90
72.5	52.38	52.20	52.01	51.48	50.95	50.24	49.53	49.68	49.82
75.0	44.91	44.98	45.05	44.43	43.81	42.74	41.66	41.80	41.94
77.5	38.17	38.52	38.87	38.05	37.23	35.69	34.14	34.17	34.21
80.0	31.77	31.90	32.03	31.07	30.11	28.53	26.95	26.63	26.31
82.5	26.47	26.53	26.57	25.53	24.49	22.46	20.43	19.62	18.81
85.0	22.19	22.04	21.89	20.38	18.86	16.62	14.38	13.13	11.88
87.5	18.54	18.26	17.98	16.27	14.55	12.01	9.47	8.10	6.73
90.0	15.52	15.10	14.68	12.95	11.22	8.84	6.46	5.64	4.82
100.0	7.82	7.29	6.76	5.83	4.89	4.57	4.25	5.24	6.24
110.0	4.14	3.61	3.07	2.87	2.68	3.24	3.79	4.42	5.04
120.0	1.98	1.90	1.82	1.99	2.15	2.60	3.04	3.32	3.60
130.0	1.33	1.41	1.49	1.75	2.00	2.17	2.34	2.41	2.48
140.0	0.89	0.96	1.02	1.12	1.21	1.30	1.38	1.42	1.46
150.0	0.60	0.63	0.67	0.69	0.71	0.73	0.74	0.75	0.75
160.0	0.37	0.37	0.38	0.39	0.40	0.41	0.41	0.41	0.42
170.0	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HLS HOUSE LIGHT.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	120.97	N.A.	14.10
0-30	253.82	N.A.	29.70
0-40	406.55	N.A.	47.50
0-60	676.69	N.A.	79.10
0-80	809.03	N.A.	94.60
0-90	830.46	N.A.	97.10
10-90	799.00	N.A.	93.40
20-40	285.58	N.A.	33.40
20-50	432.81	N.A.	50.60
40-70	355.67	N.A.	41.60
60-80	132.34	N.A.	15.50
70-80	46.81	N.A.	5.50
80-90	21.43	N.A.	2.50
90-110	17.35	N.A.	2.00
90-120	20.98	N.A.	2.50
90-130	22.95	N.A.	2.70
90-150	24.47	N.A.	2.90
90-180	24.78	N.A.	2.90
110-180	7.43	N.A.	0.90
0-180	855.24	N.A.	100.00

Total Luminaire Efficiency = N.A.%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	31.46
10-20	89.51
20-30	132.85
30-40	152.73
40-50	147.23
50-60	122.90
60-70	85.53
70-80	46.81
80-90	21.43
90-100	11.00
100-110	6.35
110-120	3.63
120-130	1.96
130-140	1.03
140-150	0.49
150-160	0.22
160-170	0.08
170-180	0.01

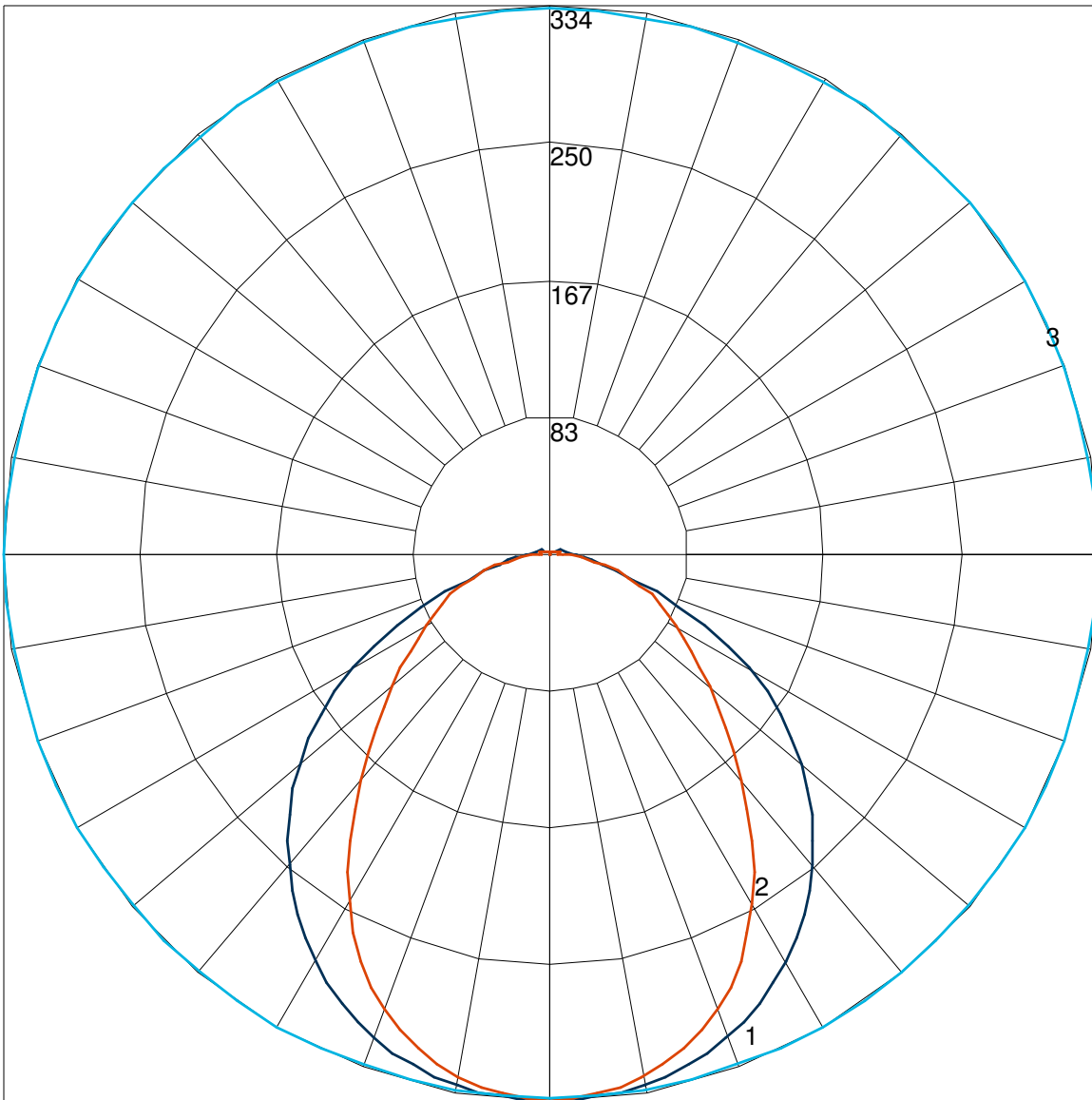
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HLS HOUSE LIGHT.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	108	104	100	96	105	101	97	94	96	93	90	92	89	87	88	86	84	82
2	99	91	84	79	96	89	83	78	85	80	75	81	77	73	78	74	71	69
3	91	80	73	66	88	79	71	65	75	69	64	72	67	62	69	65	61	59
4	83	72	63	57	81	70	62	56	67	60	55	65	59	54	62	57	53	51
5	77	64	56	49	74	63	55	49	61	53	48	58	52	47	56	51	46	44
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	51	45	41	39
7	66	53	44	38	64	52	44	38	50	43	38	48	42	37	47	41	37	35
8	62	48	40	34	60	47	40	34	46	39	34	44	38	33	43	37	33	31
9	58	44	36	31	56	44	36	31	42	35	31	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	37	31	27	26

POLAR GRAPH



Maximum Candela = 333.58 Located At Horizontal Angle = 0, Vertical Angle = 2.5

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

# 2 - Vertical Plane Through Horizontal Angles (90 - 270)

# 3 - Horizontal Cone Through Vertical Angle (2.5) (Through Max. Cd.)