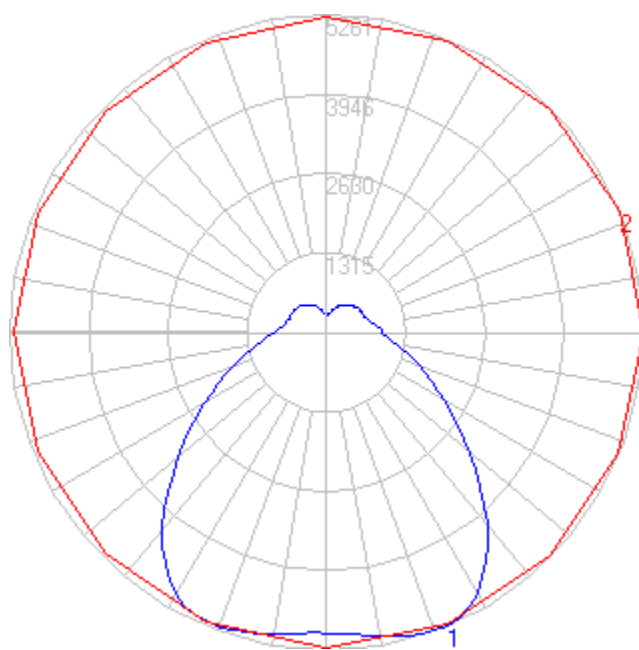




10163 US HWY 31 North, Charlevoix, MI 49720 231-547-6584

Test Report Number	06063
Date of Test	5/31/2017
Manufacturer	A.L.P.-LEXALITE
Catalog Number	BT-HL200W
Test Item	BETOP LED POD WITH 350 LEDS IN A CIRCULAR PATTERN WITH FLAT CLEAR LENS, S16 INTERFACE, AND LUMIEO WIDEBAY LENS
Lamp	HL200W-350L
Operating Orientation	PENDENT
Driver Type	INTERNAL
Test Time	90 MINUTES
Ambient Temperature (C)	25.0
Stabilization Time	57 MINUTES
Power Factor	.992
Power (W)	197.83
Voltage(V)	120.01
Current(A)	1.6623
Notes	DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120Vac, 60Hz)
Luminous Flux	21280.26
Luminous Efficacy	107.57
Test Distance	22.25 FEET
Test Equipment	GONIOPHOTOMETER
LAB Test Method Reference	IESNA LM-79-08
Technician	CG
Spacing Criterion(0-180)	1.42
Spacing Criterion(90-270)	1.44
Spacing Criterion(diagonal)	1.44
Sample Width(mm)	
Sample Height/Depth(mm)	
Luminous Diameter/Length(mm)	
Luminous Width(mm)	
Luminous Height/Depth(mm)	



Coefficient of Utilization

Coefficients Of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW70	50	30	10		70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	81
1	103	97	93	88	98	93	89	85	85	82	79	78	76	73	72	69	68	64
2	93	84	77	71	89	81	74	69	74	69	64	68	64	60	62	59	56	53
3	85	74	66	59	81	71	63	57	65	59	54	60	55	50	55	51	47	44
4	77	65	56	50	74	63	55	48	58	51	46	53	47	43	49	44	40	37
5	71	58	49	43	68	56	48	42	52	45	39	48	42	37	44	39	35	32
6	66	52	43	37	62	50	42	36	47	40	34	43	37	33	40	35	31	28
7	61	47	39	33	58	46	38	32	42	35	30	39	33	29	36	31	27	25
8	57	43	35	29	54	42	34	28	39	32	27	36	30	26	33	28	24	22
9	53	39	31	26	50	38	31	25	36	29	24	33	27	23	31	26	22	20
10	49	36	29	23	47	35	28	23	33	26	22	31	25	21	29	24	20	18

Zonal Lumen Summary

	Summary Zonal Lumens	Zonal Lumens-% Lamp	Zonal Lumens-% Fixture
0-30	4337.31		20.38%
0-40	7253.23		34.08%
0-60	12524.48		58.85%
0-90	17062.74		80.18%
90-110	1647.65		7.74%
90-130	2907.08		13.66%
90-150	3852.76		18.10%
90-180	4217.52		19.82%

	Zonal Lumens		Zonal Lumens
0-10	476.37	170-180	29.14
10-20	1463.84	160-170	112.20
20-30	2397.10	150-160	223.42
30-40	2915.92	140-150	353.45
40-50	2838.12	130-140	592.23
50-60	2433.13	120-130	592.23
60-70	1940.32	110-120	667.20
70-80	1483.18	100-110	750.41
80-90	1114.76	90-100	897.24

Candela Table

	0.00	22.50	45.00	67.50	90.00	112.50	135.00	157.50	180.00	202.50	225.00	247.50	270.00	292.50	315.00	337.50	360.00
0.00	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0	4982.0
2.50	5000.9	4995.0	4993.8	4991.6	4987.6	4984.2	4980.6	4981.5	4982.3	4983.7	4984.9	4988.8	4992.8	4996.0	5002.1	5003.1	5000.9
5.00	5028.4	5026.0	5020.2	5013.9	5005.4	5000.9	4994.1	4992.5	4999.7	5003.4	5005.1	5011.2	5018.6	5027.4	5032.0	5037.6	5028.4
7.50	5065.1	5064.0	5055.9	5043.8	5033.1	5024.1	5016.1	5011.6	5025.2	5028.6	5034.1	5046.0	5054.3	5064.0	5076.4	5082.8	5065.1
10.00	5111.8	5107.8	5098.8	5085.9	5071.0	5061.6	5050.3	5047.1	5061.5	5062.8	5070.6	5082.9	5096.4	5105.7	5121.1	5127.5	5111.8
12.50	5161.9	5158.5	5146.4	5132.0	5117.1	5102.5	5094.4	5088.1	5099.6	5103.4	5110.2	5123.3	5136.8	5152.3	5165.5	5173.9	5161.9
15.00	5209.5	5202.3	5193.7	5176.4	5161.7	5146.5	5137.1	5133.0	5140.7	5141.0	5146.0	5160.4	5172.7	5188.7	5202.4	5212.1	5209.5
17.50	5243.5	5240.8	5230.0	5213.5	5195.6	5183.8	5175.1	5171.5	5174.8	5177.6	5177.6	5187.5	5200.3	5216.5	5230.9	5240.6	5243.5
20.00	5260.7	5259.5	5246.3	5232.7	5217.7	5205.0	5200.7	5195.6	5194.4	5191.5	5195.6	5202.0	5214.4	5223.8	5233.2	5246.4	5260.7
22.50	5246.4	5248.2	5240.5	5226.0	5215.2	5209.7	5204.6	5203.9	5194.7	5189.6	5186.2	5193.8	5201.2	5206.9	5215.3	5225.2	5246.4
25.00	5204.6	5207.0	5200.6	5191.4	5182.1	5181.0	5184.7	5182.7	5165.4	5154.3	5155.2	5154.8	5155.1	5158.3	5163.0	5169.7	5204.6
27.50	5123.0	5122.9	5126.0	5119.8	5120.9	5123.3	5131.8	5130.0	5100.9	5087.4	5084.5	5080.9	5076.1	5069.6	5067.5	5073.4	5123.0
30.00	5001.6	5001.8	5008.7	5008.6	5014.9	5025.4	5037.1	5042.8	4995.6	4982.5	4976.5	4970.0	4954.2	4939.3	4932.7	4936.9	5001.6
32.50	4830.1	4838.7	4844.1	4853.6	4863.7	4885.4	4904.0	4910.6	4855.9	4838.9	4828.8	4816.9	4795.0	4773.6	4758.2	4760.5	4830.1
35.00	4623.7	4630.8	4647.2	4662.6	4676.9	4701.8	4729.8	4740.8	4678.4	4661.8	4649.1	4627.6	4598.4	4572.9	4554.6	4554.0	4623.7
37.50	4394.6	4398.8	4421.5	4438.2	4465.0	4492.1	4522.7	4533.8	4472.0	4453.1	4437.8	4411.6	4380.4	4347.0	4325.3	4319.8	4394.6
40.00	4147.3	4152.1	4173.8	4197.2	4229.7	4262.7	4293.1	4304.7	4231.3	4215.5	4200.1	4174.7	4137.3	4101.8	4073.0	4067.9	4147.3
42.50	3886.8	3896.5	3914.9	3942.5	3976.1	4014.1	4042.9	4054.9	3977.7	3960.5	3945.9	3918.1	3878.3	3841.1	3816.7	3808.7	3886.8
45.00	3624.2	3633.1	3651.1	3683.7	3717.4	3753.0	3779.4	3790.9	3716.8	3701.3	3687.8	3654.8	3622.3	3586.9	3561.1	3547.9	3624.2
47.50	3368.3	3372.3	3394.5	3422.1	3459.6	3492.7	3516.6	3526.2	3457.5	3444.2	3427.7	3397.8	3369.3	3334.2	3310.1	3294.6	3368.3
50.00	3121.3	3127.8	3149.4	3175.1	3211.0	3243.9	3264.7	3273.0	3203.8	3192.6	3176.6	3152.2	3126.1	3093.9	3065.3	3051.9	3121.3
52.50	2893.0	2899.8	2918.2	2942.4	2974.7	3004.1	3028.2	3033.5	2970.8	2959.0	2941.5	2918.4	2891.2	2863.1	2839.1	2826.9	2893.0
55.00	2676.1	2683.9	2701.3	2724.4	2752.9	2779.7	2802.7	2808.9	2753.8	2741.6	2726.4	2700.6	2680.3	2656.0	2632.2	2615.9	2676.1
57.50	2474.2	2477.8	2499.2	2516.5	2544.5	2567.1	2588.9	2596.3	2546.8	2536.2	2518.1	2497.1	2480.6	2457.1	2436.6	2420.8	2474.2
60.00	2280.8	2285.4	2306.2	2321.2	2346.7	2369.0	2388.0	2394.8	2347.2	2336.4	2321.5	2306.0	2290.7	2269.7	2245.2	2231.6	2280.8
62.50	2100.3	2106.1	2121.2	2137.5	2157.1	2176.9	2195.4	2201.9	2156.5	2143.4	2132.0	2118.8	2103.3	2085.0	2066.3	2056.9	2100.3
65.00	1931.2	1938.2	1952.1	1966.9	1981.4	1998.5	2011.2	2018.2	1975.4	1963.4	1956.8	1943.8	1934.5	1918.0	1903.5	1893.7	1931.2
67.50	1777.7	1783.3	1798.5	1808.6	1823.2	1835.2	1846.6	1851.7	1808.4	1801.8	1792.3	1791.6	1777.6	1763.7	1751.3	1743.3	1777.7
70.00	1638.5	1644.3	1657.7	1665.7	1678.7	1688.0	1697.8	1701.1	1657.3	1653.6	1646.5	1644.7	1636.1	1625.0	1612.0	1603.6	1638.5
72.50	1514.2	1518.8	1528.5	1535.9	1545.9	1551.5	1559.5	1562.2	1520.6	1519.0	1511.8	1512.9	1502.9	1497.3	1485.8	1479.9	1514.2
75.00	1398.4	1403.1	1410.5	1417.1	1424.4	1428.7	1433.6	1436.2	1398.7	1395.2	1392.1	1389.6	1383.9	1380.7	1373.0	1368.2	1398.4
77.50	1292.3	1294.9	1303.1	1306.8	1312.5	1313.8	1319.2	1321.4	1283.8	1282.9	1278.0	1278.9	1275.1	1274.0	1267.5	1263.9	1292.3
80.00	1195.5	1196.9	1203.0	1206.2	1210.5	1209.9	1214.4	1215.1	1179.7	1179.5	1176.9	1178.5	1176.7	1176.3	1172.3	1168.6	1195.5
82.50	1109.5	1108.3	1113.0	1116.0	1118.2	1116.9	1118.7	1118.5	1086.8	1087.3	1086.6	1088.6	1088.2	1089.4	1086.6	1085.4	1109.5
85.00	1030.4	1029.5	1033.3	1035.1	1036.4	1034.1	1034.3	1033.9	1006.4	1005.9	1007.5	1009.6	1009.9	1012.3	1012.0	1009.3	1030.4
87.50	962.4	960.5	963.7	964.9	965.0	962.1	960.4	959.6	934.8	934.4	936.2	939.1	941.6	944.5	946.0	943.5	962.4
90.00	911.1	910.4	911.0	909.0	905.6	900.5	897.1	894.5	874.0	874.9	876.9	880.6	885.5	889.8	893.7	892.2	911.1
92.50	928.3	932.3	926.5	907.2	880.5	853.6	846.2	842.4	825.5	826.8	829.1	834.7	847.2	865.0	876.9	885.6	928.3
95.00	854.7	855.9	853.6	843.6	832.1	820.4	807.8	800.6	786.2	787.9	790.8	795.9	804.6	817.9	830.7	843.4	854.7
97.50	840.8	845.0	832.9	814.8	799.0	783.1	771.2	765.3	754.3	755.3	758.1	763.1	770.6	783.7	798.6	814.5	840.8
100.00	796.0	799.3	792.3	779.5	765.5	751.0	740.9	734.7	726.9	728.2	731.3	736.4	743.4	754.1	766.7	777.4	796.0
102.50	761.0	764.5	760.0	749.2	737.0	724.0	716.1	710.1	703.5	704.8	708.5	713.4	719.4	727.7	738.3	747.4	761.0
105.00	734.1	737.2	732.9	723.4	711.8	702.4	695.8	690.3	684.5	686.1	689.5	694.0	700.2	704.9	713.8	722.7	734.1
107.50	703.7	707.7	706.9	698.9	691.3	685.8	680.0	674.9	670.9	671.8	674.9	679.2	684.0	687.6	690.5	693.1	703.7
110.00	680.4	682.7	683.4	682.1	678.7	674.1	669.7	664.8	662.6	663.5	666.4	669.6	673.9	676.3	677.6	678.1	680.4
112.50	674.5	676.7	677.7	677.5	675.6	671.7	667.5	663.9	663.4	664.1	666.5	669.0	671.2	672.5	673.1	673.8	674.5
115.00	674.8	676.6	677.9	678.0	676.3	673.0	668.8	665.7	664.3	664.9	667.1	669.4	671.4	672.3	673.1	673.9	674.8
117.50	674.3	676.4	677.8	677.9	676.1	672.7	668.9	665.8	663.7	664.5	666.2	668.4	670.2	671.2	671.6	672.5	674.3

120.00	672.2	674.2	675.7	675.9	674.5	671.3	667.8	664.7	661.7	662.1	663.8	665.9	667.5	668.0	668.7	669.0	672.2
122.50	668.3	670.2	671.4	672.0	670.9	668.1	664.8	661.7	658.9	658.8	660.1	662.2	663.8	664.1	664.1	664.9	668.3
125.00	662.6	664.6	666.1	666.9	665.9	663.1	660.2	657.7	653.9	654.1	655.2	656.9	658.6	658.2	658.3	659.0	662.6
127.50	655.6	657.4	659.1	660.0	659.2	657.0	653.9	651.6	647.5	647.8	648.7	650.0	651.4	650.9	651.2	651.7	655.6
130.00	647.2	648.7	650.6	651.4	651.4	649.4	646.6	644.5	640.0	639.7	640.5	641.5	642.8	642.3	642.1	642.1	647.2
132.50	637.2	639.0	640.3	641.7	641.6	640.1	637.5	635.7	630.3	630.4	630.9	631.9	632.7	632.0	631.7	631.9	637.2
135.00	625.4	627.1	629.0	630.1	630.6	629.2	626.9	625.5	619.2	619.0	619.2	619.9	620.6	619.7	619.4	619.4	625.4
137.50	612.5	613.9	615.7	617.0	617.6	616.5	614.6	613.6	606.6	606.4	606.6	606.7	607.1	605.9	605.7	605.5	612.5
140.00	597.2	599.2	600.9	602.3	602.8	602.4	600.6	599.7	592.4	592.1	592.1	592.2	592.3	591.6	590.8	589.8	597.2
142.50	581.7	582.8	584.7	585.6	586.5	586.6	585.3	583.9	577.2	577.1	576.9	576.3	576.4	574.9	574.2	572.4	581.7
145.00	563.4	564.6	566.4	567.8	568.9	569.1	568.0	567.1	560.6	560.6	560.2	559.6	559.2	557.8	557.1	554.0	563.4
147.50	544.8	545.3	547.1	548.4	549.3	549.3	549.7	549.4	543.4	543.0	542.4	541.8	541.1	539.0	538.6	534.5	544.8
150.00	524.1	524.5	526.0	527.6	527.7	528.4	530.3	529.9	525.2	524.9	523.9	523.1	522.3	520.1	519.8	514.8	524.1
152.50	501.7	501.9	504.1	505.9	506.0	506.5	509.6	509.3	507.0	506.3	505.5	503.8	503.1	500.6	499.8	494.8	501.7
155.00	477.9	478.6	480.6	483.2	482.8	483.2	487.5	487.5	487.7	486.9	486.3	484.8	483.3	480.9	479.8	474.5	477.9
157.50	454.5	454.9	457.1	460.4	460.2	460.4	465.1	465.6	468.1	467.5	466.5	465.2	463.1	460.2	458.9	454.3	454.5
160.00	431.5	432.3	434.6	437.9	437.7	438.6	443.0	444.7	448.6	448.2	447.1	445.5	442.9	440.0	436.9	434.4	431.5
162.50	409.9	411.1	413.6	415.8	416.2	417.3	420.4	423.7	428.8	428.0	427.2	425.9	423.1	419.9	415.1	413.9	409.9
165.00	386.3	387.1	390.9	392.8	393.7	395.1	397.8	402.3	406.9	406.5	405.6	404.5	401.9	398.9	391.9	391.6	386.3
167.50	360.9	360.4	365.7	367.6	369.4	369.8	375.3	378.0	382.5	382.0	380.6	380.8	378.4	374.0	367.0	366.6	360.9
170.00	332.1	333.9	338.4	340.5	342.4	345.0	351.0	351.9	355.2	355.6	355.6	354.2	352.0	347.5	344.7	339.0	332.1
172.50	303.7	306.0	310.6	313.3	315.7	317.6	324.5	324.8	327.0	327.4	327.9	327.2	324.7	320.6	317.3	311.1	303.7
175.00	295.7	298.5	302.9	305.3	306.1	308.3	309.5	308.5	310.5	309.8	311.6	312.9	313.0	310.3	309.3	306.0	295.7
177.50	304.7	305.3	310.0	311.1	311.9	315.4	314.9	313.6	309.8	309.9	314.2	314.4	316.7	315.6	313.8	311.9	304.7
180.00	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5	313.5