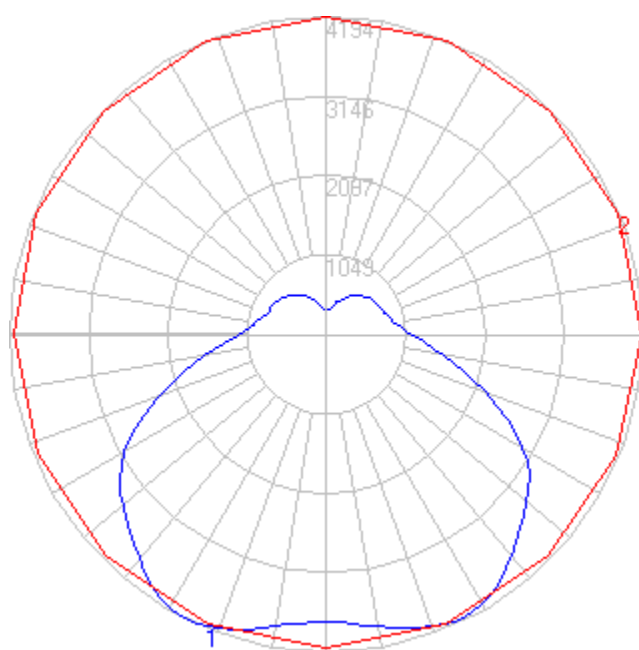




10163 US HWY 31 North, Charlevoix, MI 49720 231-547-6584

Test Report Number	06040
Date of Test	5/23/2017
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, LUMIEO S16 AND LUMIEO WIDEBAY LENS
Lamp	HL200W-350L
Operating Orientation	PENDENT
Driver Type	INTERNAL
Test Time	90 MINUTES
Ambient Temperature (C)	25.0
Stabilization Time	70 MINUTES
Power Factor	.992
Power (W)	198.38
Voltage(V)	120.02
Current(A)	1.6655
Notes	DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120Vac, 60Hz)
Luminous Flux	22870.45
Luminous Efficacy	115.29
Test Distance	22.25 FEET
Test Equipment	GONIOPHOTOMETER
LAB Test Method Reference	IESNA LM-79-08
Technician	CG
Spacing Criterion(0-180)	1.58
Spacing Criterion(90-270)	1.58
Spacing Criterion(diagonal)	1.68
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
RW	70	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		99	99	99		90	90	90	79		
1		101	95	90	85		96	91	86	82		83	79	75		75	72	69	60		
2		91	81	74	67		86	78	71	65		70	65	60		64	59	55	47		
3		82	70	61	54		78	67	59	52		61	54	49		55	50	45	39		
4		74	62	52	45		70	59	50	43		54	46	41		49	43	38	32		
5		68	54	45	38		64	52	43	37		47	40	34		43	37	32	27		
6		63	49	39	33		59	46	38	32		42	35	30		39	32	28	23		
7		58	44	35	28		55	42	33	27		38	31	26		35	29	24	20		
8		54	40	31	25		51	38	30	24		35	28	23		32	26	21	18		
9		50	36	28	22		47	35	27	21		32	25	20		29	23	19	16		
10		47	33	25	20		44	32	24	19		29	23	18		27	21	17	14		

Zonal Lumen Summary

	Summary Zonal Lumens	Zonal Lumens-% Lamp	Zonal Lumens-% Fixture
0-30	3428.53		14.99%
0-40	5943.89		25.99%
0-60	11714.71		51.22%
0-90	17868.93		78.13%
90-110	2016.63		8.82%
90-130	3512.41		15.36%
90-150	4603.54		20.13%
90-180	5001.52		21.87%

	Zonal Lumens		Zonal Lumens
0-10	364.07	170-180	31.50
10-20	1138.35	160-170	121.58
20-30	1926.11	150-160	244.90
30-40	2515.36	140-150	396.25
40-50	2813.52	130-140	694.88
50-60	2957.30	120-130	694.88
60-70	2661.13	110-120	800.90
70-80	2030.37	100-110	916.58
80-90	1462.72	90-100	1100.05

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	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6	3798.6
2.50	3803.3	3804.7	3806.4	3807.2	3807.9	3808.4	3808.1	3807.0	3808.4	3807.9	3807.5	3807.8	3807.9	3808.8	3809.1	3809.9	3803.3
5.00	3824.8	3826.6	3829.0	3831.3	3832.7	3832.8	3832.1	3830.0	3837.2	3835.7	3834.7	3834.3	3834.1	3835.7	3836.6	3837.2	3824.8
7.50	3858.6	3860.2	3863.6	3866.3	3869.0	3869.3	3868.7	3864.7	3878.0	3875.6	3873.6	3873.7	3874.2	3874.1	3875.6	3877.2	3858.6
10.00	3902.8	3905.6	3910.4	3913.2	3917.4	3918.0	3917.1	3911.2	3925.6	3922.3	3919.3	3919.1	3919.5	3921.1	3921.5	3924.5	3902.8
12.50	3955.7	3960.3	3965.8	3970.2	3973.7	3976.2	3973.6	3966.4	3976.6	3971.7	3969.6	3968.1	3970.3	3972.6	3972.6	3975.4	3955.7
15.00	4010.8	4016.5	4022.7	4027.8	4032.3	4034.2	4031.2	4023.3	4026.8	4020.2	4017.5	4016.0	4019.0	4022.4	4023.8	4025.9	4010.8
17.50	4060.3	4066.6	4073.7	4079.3	4084.5	4085.0	4081.6	4071.9	4069.3	4060.9	4057.8	4058.5	4062.4	4064.8	4067.4	4070.5	4060.3
20.00	4101.5	4107.8	4114.9	4120.3	4128.7	4128.2	4122.7	4110.9	4103.2	4093.8	4089.5	4091.4	4096.9	4102.0	4104.3	4109.3	4101.5
22.50	4138.4	4144.8	4151.4	4154.0	4162.5	4167.6	4159.5	4146.5	4131.8	4120.2	4117.1	4120.2	4127.3	4132.9	4135.8	4141.6	4138.4
25.00	4162.8	4169.5	4172.8	4178.2	4185.6	4190.9	4183.6	4168.7	4145.1	4132.8	4130.5	4134.6	4142.9	4149.4	4152.9	4157.9	4162.8
27.50	4168.4	4175.5	4177.1	4183.3	4190.3	4194.1	4188.6	4172.3	4136.6	4124.9	4123.0	4127.6	4136.5	4143.6	4147.6	4152.9	4168.4
30.00	4148.8	4156.2	4156.0	4162.1	4168.4	4170.8	4167.1	4150.4	4102.9	4090.8	4089.9	4095.6	4105.8	4112.5	4117.0	4120.9	4148.8
32.50	4100.7	4107.0	4105.8	4111.2	4116.8	4120.3	4118.1	4100.7	4044.5	4033.0	4032.0	4039.3	4050.3	4057.1	4061.5	4064.2	4100.7
35.00	4026.6	4033.4	4031.8	4035.8	4042.3	4046.5	4045.1	4024.4	3967.8	3956.0	3955.7	3965.7	3975.7	3982.6	3985.5	3989.4	4026.6
37.50	3939.2	3946.1	3942.9	3946.6	3954.2	3959.0	3957.3	3937.9	3878.8	3865.5	3866.6	3878.1	3888.7	3896.0	3898.1	3901.5	3939.2
40.00	3844.7	3851.2	3846.3	3853.3	3858.8	3864.8	3864.1	3845.2	3783.3	3769.2	3770.8	3784.2	3797.6	3801.8	3803.7	3804.9	3844.7
42.50	3748.3	3752.8	3748.1	3756.7	3762.0	3767.4	3769.1	3749.0	3686.6	3671.2	3675.0	3690.2	3703.7	3707.2	3709.8	3709.9	3748.3
45.00	3655.7	3656.5	3653.8	3662.6	3671.2	3675.8	3676.4	3656.0	3594.7	3578.4	3581.6	3600.8	3615.6	3619.0	3620.6	3621.3	3655.7
47.50	3574.8	3572.7	3569.2	3579.3	3592.1	3593.9	3594.0	3575.5	3512.0	3494.3	3498.2	3518.6	3534.0	3538.4	3539.8	3542.1	3574.8
50.00	3502.4	3499.2	3494.5	3508.1	3519.8	3520.7	3519.9	3503.1	3434.9	3416.6	3419.8	3440.6	3459.1	3462.6	3464.4	3467.0	3502.4
52.50	3423.0	3419.9	3415.2	3431.0	3442.3	3439.8	3440.6	3423.5	3347.9	3329.7	3333.1	3354.4	3373.0	3376.8	3379.3	3382.9	3423.0
55.00	3327.0	3322.7	3320.1	3336.2	3348.5	3342.5	3341.4	3322.5	3246.7	3230.1	3230.4	3253.1	3269.8	3273.2	3275.6	3280.2	3327.0
57.50	3208.4	3204.5	3202.5	3218.0	3233.6	3225.9	3220.0	3202.9	3126.1	3109.7	3109.3	3128.9	3144.3	3148.6	3149.9	3156.2	3208.4
60.00	3062.7	3063.0	3059.4	3078.6	3093.0	3087.2	3078.4	3062.8	2982.2	2969.4	2965.7	2982.7	2997.5	2999.8	3001.8	3008.2	3062.7
62.50	2895.7	2898.8	2895.5	2917.9	2931.3	2924.1	2916.5	2901.3	2815.9	2804.0	2800.3	2813.1	2826.0	2829.5	2827.6	2835.6	2895.7
65.00	2712.3	2713.8	2713.6	2735.2	2750.1	2739.2	2732.2	2715.1	2627.4	2620.0	2615.4	2626.3	2632.3	2635.6	2634.2	2643.1	2712.3
67.50	2512.7	2515.9	2517.2	2534.3	2552.3	2543.0	2531.9	2515.3	2433.1	2423.2	2420.7	2418.8	2429.9	2433.8	2434.3	2440.6	2512.7
70.00	2307.3	2315.7	2313.9	2331.3	2345.5	2343.0	2329.9	2316.0	2238.4	2232.1	2228.0	2225.2	2235.3	2236.0	2236.8	2239.2	2307.3
72.50	2116.4	2126.1	2124.6	2142.4	2154.5	2153.8	2146.6	2132.2	2056.2	2051.9	2048.0	2042.7	2051.9	2052.8	2050.9	2053.2	2116.4
75.00	1937.0	1944.7	1949.9	1962.7	1974.8	1974.4	1970.4	1954.9	1883.2	1882.4	1876.9	1870.8	1878.1	1878.2	1873.8	1874.9	1937.0
77.50	1766.1	1774.6	1783.2	1792.2	1805.6	1804.7	1800.3	1786.2	1722.9	1721.1	1716.4	1709.3	1714.8	1715.8	1710.3	1709.2	1766.1
80.00	1611.3	1619.1	1624.8	1634.6	1645.8	1648.4	1641.2	1629.8	1576.2	1575.2	1569.2	1564.5	1566.0	1566.2	1562.1	1561.2	1611.3
82.50	1469.4	1478.4	1482.9	1493.5	1500.8	1504.5	1500.8	1490.1	1443.8	1441.5	1436.2	1431.0	1433.5	1432.7	1427.9	1428.3	1469.4
85.00	1344.2	1355.4	1359.9	1368.8	1373.8	1377.0	1375.1	1365.1	1325.1	1324.7	1318.8	1314.5	1315.7	1313.2	1308.3	1308.3	1344.2
87.50	1235.7	1245.7	1251.1	1258.8	1264.1	1265.3	1264.2	1256.0	1222.2	1220.6	1217.2	1211.7	1212.7	1211.5	1205.7	1206.1	1235.7
90.00	1141.7	1150.2	1155.5	1163.1	1167.2	1168.9	1166.6	1160.1	1133.2	1131.1	1128.4	1124.2	1124.8	1122.6	1119.1	1118.0	1141.7
92.50	1065.4	1073.2	1078.5	1085.2	1089.6	1091.8	1089.5	1083.5	1062.0	1059.6	1057.3	1053.0	1052.8	1050.8	1048.0	1047.3	1065.4
95.00	1004.8	1011.6	1016.5	1022.6	1027.2	1029.2	1027.2	1022.7	1004.6	1003.1	1000.8	996.8	995.1	993.3	991.0	989.7	1004.8
97.50	956.5	963.1	968.4	974.4	979.0	980.0	978.3	974.4	958.7	958.0	956.0	951.8	949.9	949.2	946.6	946.0	956.5
100.00	918.2	923.2	927.6	933.9	937.8	938.5	936.7	933.5	921.8	920.7	919.5	916.6	914.5	913.4	911.5	909.9	918.2
102.50	886.3	890.7	895.1	900.9	905.0	905.9	904.4	900.8	891.4	890.4	889.9	886.4	884.8	883.9	881.7	880.7	886.3
105.00	860.2	864.5	868.9	874.3	878.2	879.6	877.8	874.7	866.0	865.3	864.4	861.6	860.1	859.0	857.5	855.3	860.2
107.50	838.7	842.5	846.7	851.4	855.5	856.4	854.6	852.1	844.0	843.2	842.5	839.7	838.7	838.5	836.3	834.8	838.7
110.00	821.1	824.4	827.8	831.5	835.2	835.8	833.5	830.9	825.0	824.2	824.0	821.8	821.4	821.3	820.2	818.5	821.1
112.50	809.6	812.3	815.1	818.5	821.2	821.8	819.4	816.9	812.4	811.5	811.5	810.7	810.6	810.5	809.9	808.2	809.6
115.00	803.7	806.0	808.5	811.4	813.2	813.8	811.6	809.2	804.9	804.0	804.2	803.8	803.7	803.9	803.5	802.1	803.7
117.50	798.0	800.3	802.9	805.5	807.2	807.6	805.8	803.2	798.7	797.6	797.8	797.2	797.6	797.6	797.2	795.7	798.0

120.00	791.4	793.7	796.5	798.6	799.9	800.0	798.8	796.7	791.3	790.1	790.1	789.4	789.9	790.3	789.7	788.6	791.4
122.50	783.3	785.4	788.2	790.2	791.6	791.8	790.2	788.3	782.9	781.9	781.5	780.7	781.3	781.8	781.3	779.8	783.3
125.00	773.1	775.7	778.0	780.1	781.3	781.4	780.0	778.4	772.8	771.6	771.2	770.4	771.0	771.1	770.7	769.5	773.1
127.50	761.6	764.0	766.5	768.3	768.9	769.0	768.7	767.0	761.0	759.2	758.3	758.0	758.3	758.9	758.0	757.3	761.6
130.00	748.5	750.6	752.8	755.1	755.8	755.2	755.2	754.0	746.8	745.3	744.7	743.3	744.6	745.2	744.5	743.8	748.5
132.50	733.7	735.5	738.1	740.3	740.8	740.4	740.3	738.9	731.6	729.6	729.2	727.2	729.0	729.0	728.4	728.5	733.7
135.00	716.3	718.8	721.0	723.1	723.8	723.2	723.3	721.8	713.5	710.9	711.1	708.9	711.1	711.0	710.1	710.2	716.3
137.50	697.9	699.8	702.5	704.4	704.8	703.7	704.2	703.0	693.8	691.6	691.8	689.9	691.4	691.2	689.7	691.1	697.9
140.00	677.7	679.4	682.0	684.0	684.2	683.5	683.6	682.7	673.5	670.8	671.0	668.9	670.1	669.8	668.0	670.6	677.7
142.50	656.3	657.2	660.0	662.5	662.7	661.7	661.4	661.4	651.1	648.3	648.4	646.6	647.4	647.3	645.4	648.4	656.3
145.00	633.6	634.7	637.1	639.4	639.9	638.9	638.1	638.1	627.5	624.8	624.8	623.0	623.5	623.5	621.0	625.1	633.6
147.50	609.2	610.0	612.6	614.8	615.1	614.5	613.3	613.6	601.7	599.7	600.0	598.0	598.3	599.0	596.2	600.7	609.2
150.00	583.7	584.4	587.3	589.2	589.4	588.6	587.4	588.1	575.2	574.7	574.8	572.8	572.8	573.7	571.1	575.4	583.7
152.50	557.4	557.4	560.2	562.2	563.1	562.0	560.9	561.6	549.0	550.1	550.4	547.7	548.0	549.3	546.8	549.5	557.4
155.00	530.1	530.1	532.9	534.7	536.3	535.2	533.7	534.6	524.1	525.2	525.6	524.1	523.7	524.9	522.8	523.9	530.1
157.50	504.0	503.5	505.9	507.6	509.2	508.8	507.6	508.2	500.2	500.7	501.7	500.6	500.4	500.8	499.2	499.5	504.0
160.00	478.1	478.0	480.5	482.1	483.7	483.1	482.5	482.6	477.0	477.5	477.4	477.3	476.7	477.4	476.4	475.7	478.1
162.50	453.8	454.5	456.9	457.8	459.0	458.9	457.7	457.1	454.1	453.4	452.5	453.7	453.2	453.9	454.0	452.6	453.8
165.00	428.8	431.0	431.9	432.3	434.1	433.4	430.7	430.1	429.2	427.5	425.6	427.4	427.7	428.7	428.3	427.8	428.8
167.50	403.1	404.2	404.5	405.5	407.0	405.6	402.4	400.3	401.5	400.0	397.3	398.7	399.9	400.5	400.9	401.1	403.1
170.00	375.8	376.0	377.2	377.0	378.3	375.3	372.7	368.9	373.0	370.8	367.2	368.9	370.5	371.4	371.1	371.8	375.8
172.50	348.6	348.2	348.6	348.3	349.0	345.9	341.3	338.3	343.4	341.0	337.4	339.0	340.9	341.5	341.2	343.1	348.6
175.00	331.9	329.6	327.9	327.5	329.7	329.0	325.5	325.9	341.1	337.2	334.9	334.5	334.7	331.7	331.1	331.9	331.9
177.50	342.3	338.8	333.0	334.3	335.9	334.2	332.2	332.6	347.4	337.6	336.3	336.2	338.9	335.4	333.0	336.1	342.3
180.00	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6	338.6