

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: McGRAW-EDISON

Report Number: P299255

Luminaire Tested: **GLNA-AF-07-LED-E1-T3-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299255
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24140)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-07-LED-E1-T3-7050-600
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(7) 70 CRI, 5000K CCT 600mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27646.3 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Full Cutoff
BUG Rating: B3 - U0 - G4

Input Watts (W): 226
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

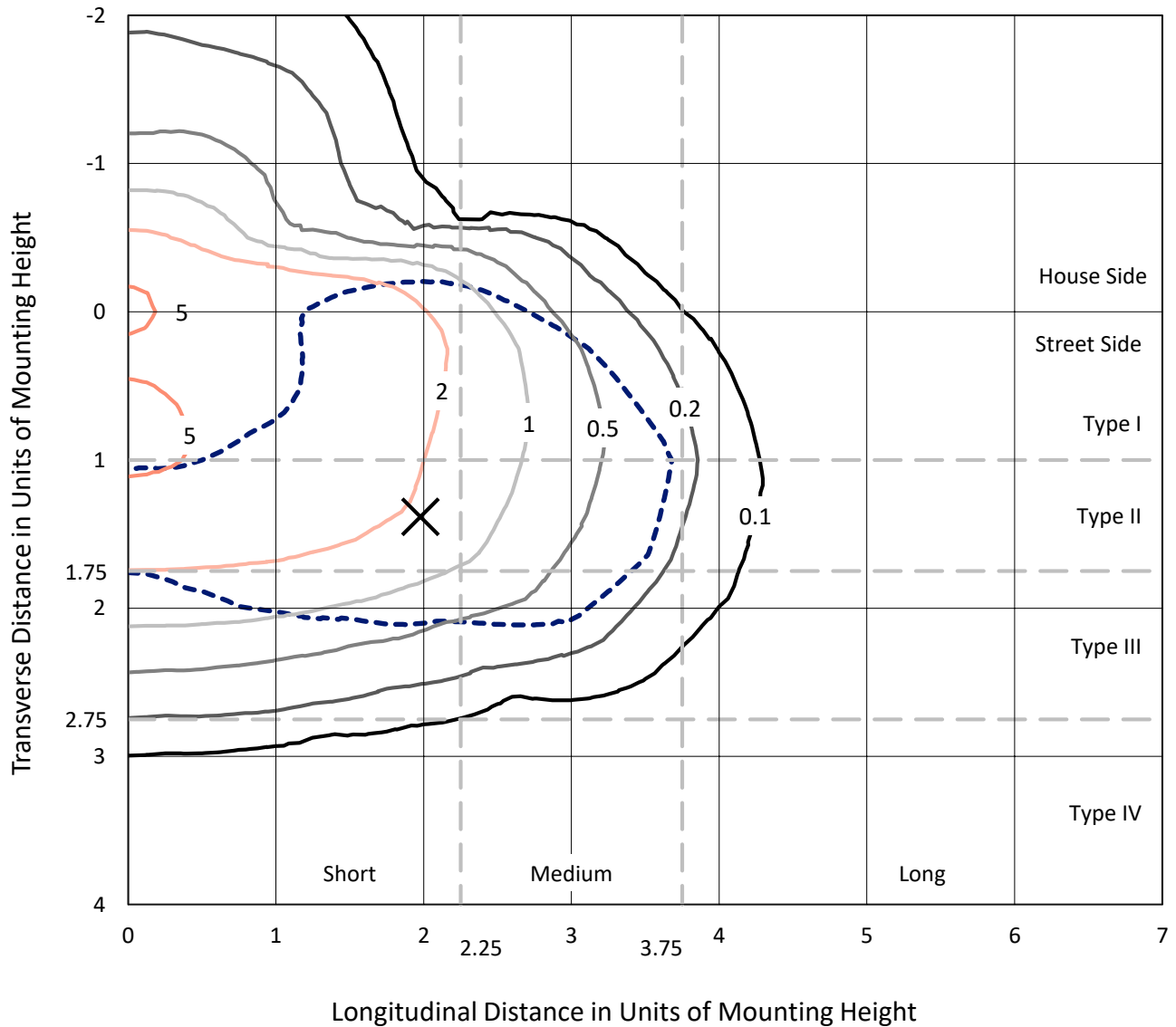


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Iso-Footcandle Lines of Horizontal Illumination

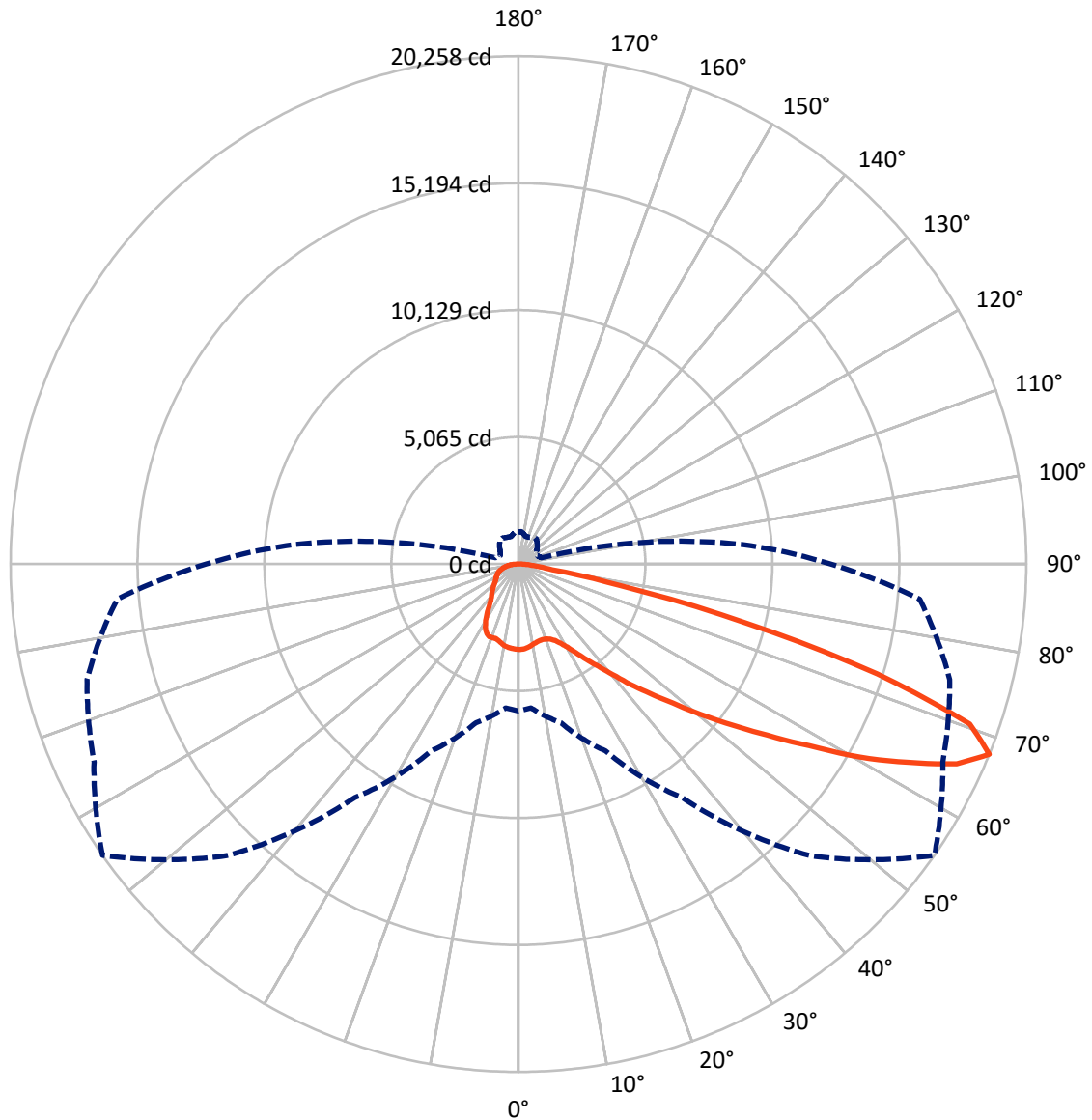
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 55-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5972.2	0.0	5972.2
	% Fixture	21.6	0.0	21.6
Street Side	Lumens	21674.1	0.0	21674.1
	% Fixture	78.4	0.0	78.4
Total	Lumens	27646.3	0.0	27646.3
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	318.2	1.2
10°-20°	901.2	3.3
20°-30°	1509.6	5.5
30°-40°	2482.5	9.0
40°-50°	4178.7	15.1
50°-60°	6577.0	23.8
60°-70°	7849.0	28.4
70°-80°	3370.5	12.2
80°-90°	459.5	1.7
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°-90°	27646.3	100.0
0°-180°	27646.3	100.0



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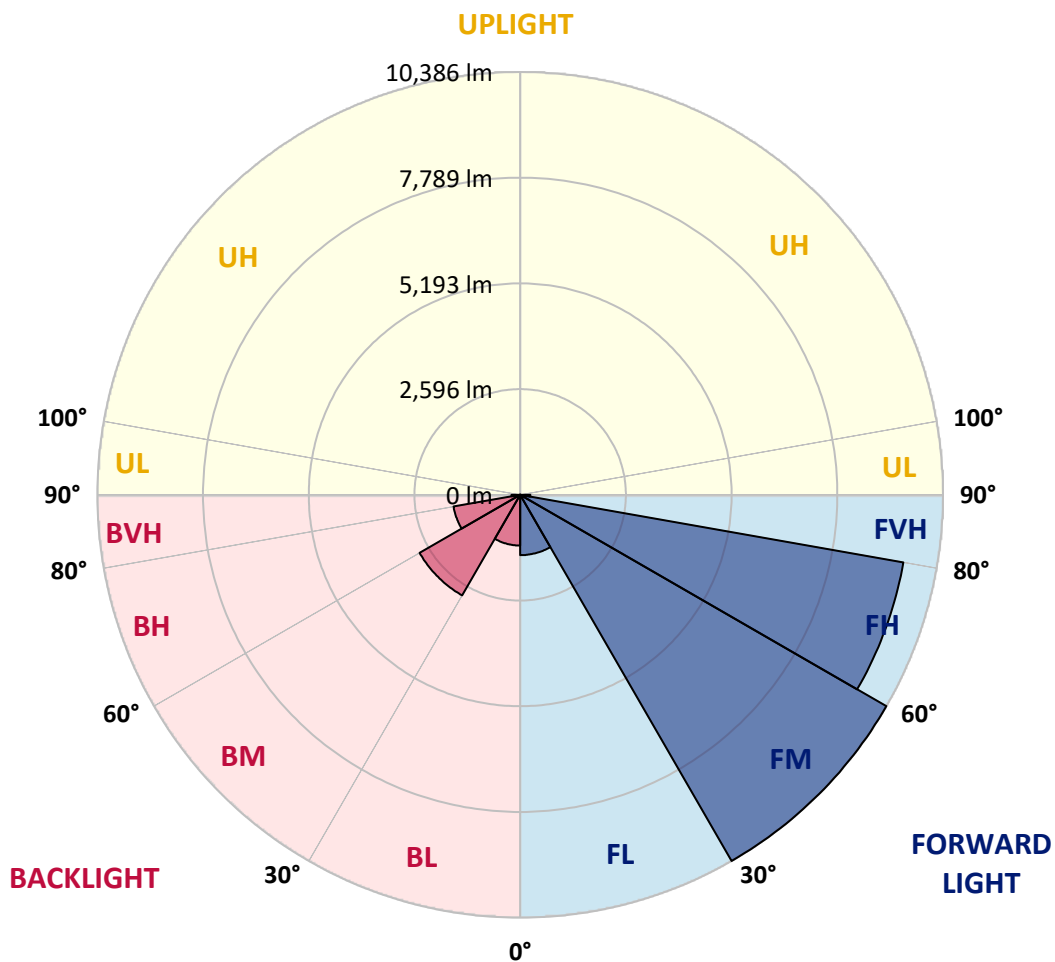
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1481.9	5.4			
FM	(30°-60°)	10386.0	37.6			
FH	(60°-80°)	9557.4	34.6			G4/12000
FVH	(80°-90°)	248.7	0.9			G3/500
BL	(0°-30°)	1247.1	4.5	B3/2500		
BM	(30°-60°)	2852.3	10.3	B3/5000		
BH	(60°-80°)	1662.0	6.0	B3/2500		G3/2500
BVH	(80°-90°)	210.8	0.8			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1
2.5°	3379.7	3381.0	3383.7	3394.4	3403.7	3401.1	3402.4	3397.1	3395.7	3387.7	3395.7
5°	3337.0	3341.0	3342.3	3359.7	3370.4	3373.0	3369.0	3362.4	3354.3	3346.3	3350.3
7.5°	3239.5	3250.2	3251.5	3275.6	3292.9	3315.6	3317.0	3318.3	3314.3	3308.9	3317.0
10°	3178.1	3180.7	3179.4	3196.8	3210.1	3235.5	3250.2	3275.6	3286.2	3288.9	3294.2
12.5°	3174.1	3171.4	3167.4	3167.4	3163.4	3174.1	3200.8	3236.8	3262.2	3270.2	3276.9
15°	3216.8	3215.5	3202.1	3182.1	3156.7	3148.7	3171.4	3211.5	3244.8	3262.2	3268.9
17.5°	3312.9	3304.9	3283.6	3238.2	3183.4	3162.1	3164.7	3198.1	3236.8	3259.5	3266.2
20°	3489.2	3489.2	3443.8	3358.3	3260.9	3210.1	3186.1	3206.1	3243.5	3274.2	3283.6
22.5°	3793.7	3796.3	3720.2	3580.0	3415.8	3307.6	3247.5	3243.5	3287.6	3322.3	3333.0
25°	4225.0	4214.3	4107.5	3907.2	3657.5	3478.5	3374.4	3350.3	3387.7	3426.4	3439.8
27.5°	4727.1	4688.3	4561.5	4319.8	3996.6	3734.9	3574.7	3535.9	3572.0	3616.1	3629.4
30°	5223.8	5183.7	5032.8	4768.4	4409.2	4078.1	3848.4	3785.6	3836.4	3899.2	3907.2
32.5°	5720.5	5720.5	5552.3	5243.8	4852.6	4488.0	4213.0	4138.2	4222.3	4298.4	4315.8
35°	6314.8	6317.4	6154.5	5783.3	5362.7	4976.8	4673.6	4618.9	4745.7	4799.2	4840.6
37.5°	7045.2	7059.9	6850.2	6401.6	5940.9	5534.9	5174.4	5099.6	5226.5	5372.0	5505.5
40°	7834.4	7853.1	7622.0	7069.2	6608.5	6183.9	5794.0	5659.1	5870.1	6147.8	6320.1
42.5°	8587.5	8683.6	8460.6	7891.8	7396.4	6957.0	6561.8	6365.5	6629.9	7049.2	7198.7
45°	9675.8	9745.2	9356.6	8841.2	8375.2	7883.8	7360.3	7153.3	7523.2	8052.0	8082.7
47.5°	10400.9	10348.8	10151.1	9830.7	9535.6	9076.2	8288.4	8061.4	8552.8	9175.0	9002.8
50°	10786.8	10802.8	10776.1	10794.8	10805.5	10517.0	9426.1	9114.9	9701.1	10452.9	10056.3
52.5°	11147.3	11040.5	11128.6	11566.6	12095.4	11988.6	10663.9	10339.4	10932.3	11871.0	11170.0
55°	11139.3	10976.4	11263.5	12036.6	13183.7	13306.5	12054.0	11680.1	12234.3	13392.0	12350.4
57.5°	10745.4	10753.4	11195.4	12207.6	13942.1	14545.7	13667.1	13106.2	13615.0	14933.0	13428.0
60°	10203.2	10276.7	10913.6	12179.5	14549.7	15561.9	15646.0	14643.2	14967.7	16333.7	14320.0
62.5°	9328.6	9406.0	10284.7	11888.4	14457.6	16540.7	17435.4	16387.1	16381.8	17183.0	14581.8
65°	7949.2	7926.5	8849.2	10800.1	13684.4	17264.4	19212.7	17894.7	17447.4	17196.3	14055.6
67.5°	5862.1	5760.6	6552.4	8225.6	11374.3	16453.9	20258.2	18679.9	17810.6	16065.3	12447.9
70°	3041.9	2940.4	3581.3	4803.2	7480.5	12841.8	19100.5	18273.9	17008.0	13466.8	9751.9
72.5°	1300.6	1283.2	1543.6	2107.1	3618.7	7407.1	14977.0	15816.9	14593.8	10033.6	6704.7
75°	874.6	869.3	966.8	1148.4	1627.8	3005.8	9372.7	11227.4	10677.3	6221.3	3771.0
77.5°	686.4	679.7	737.1	825.2	1054.9	1185.8	4159.5	6027.7	5579.0	2708.0	1650.5
80°	536.8	531.5	567.5	615.6	758.5	747.8	1368.7	2398.2	1856.1	1037.5	802.5
82.5°	423.3	423.3	452.7	454.0	538.1	510.1	714.4	1056.2	926.7	604.9	491.4
85°	387.2	387.2	418.0	339.2	351.2	321.8	443.3	626.3	587.5	248.4	213.7
87.5°	195.0	189.6	351.2	300.4	191.0	170.9	216.3	303.1	325.8	137.5	106.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1	3409.1
2.5°	3393.1	3391.7	3394.4	3395.7	3406.4	3421.1	3427.8	3437.1	3442.5	3439.8
5°	3353.0	3355.7	3366.4	3374.4	3393.1	3417.1	3430.5	3441.1	3450.5	3446.5
7.5°	3319.6	3326.3	3342.3	3349.0	3359.7	3366.4	3365.0	3369.0	3377.0	3367.7
10°	3300.9	3308.9	3321.0	3311.6	3286.2	3250.2	3216.8	3199.4	3204.8	3198.1
12.5°	3282.2	3292.9	3283.6	3239.5	3168.7	3122.0	3096.6	3099.3	3111.3	3114.0
15°	3271.5	3275.6	3235.5	3152.7	3080.6	3073.9	3087.3	3084.6	3085.9	3085.9
17.5°	3271.5	3260.9	3186.1	3103.3	3072.6	3060.6	3019.2	2967.1	2944.4	2936.4
20°	3288.9	3260.9	3170.1	3115.3	3048.5	2945.7	2836.2	2740.1	2697.4	2685.3
22.5°	3341.0	3292.9	3215.5	3120.7	2931.0	2758.8	2585.2	2470.4	2392.9	2379.6
25°	3446.5	3393.1	3304.9	3049.9	2744.1	2498.4	2300.8	2172.6	2095.1	2084.4
27.5°	3630.8	3596.0	3353.0	2893.7	2495.7	2232.7	2049.7	1950.9	1893.5	1889.5
30°	3908.5	3891.1	3329.0	2662.6	2189.9	1974.9	1886.8	1829.4	1786.7	1785.3
32.5°	4351.8	4211.6	3250.2	2380.9	1910.9	1792.0	1756.0	1721.2	1687.9	1687.9
35°	4922.0	4470.7	3100.6	2079.1	1741.3	1690.5	1645.1	1590.4	1546.3	1543.6
37.5°	5592.3	4630.9	2832.2	1836.1	1661.1	1622.4	1555.7	1474.2	1396.8	1383.4
40°	6269.4	4679.0	2454.3	1686.5	1610.4	1554.3	1472.9	1376.7	1301.9	1297.9
42.5°	6890.3	4586.8	2053.7	1583.7	1559.7	1484.9	1399.4	1314.0	1255.2	1253.9
45°	7411.1	4347.8	1717.2	1486.2	1506.2	1422.1	1346.0	1276.6	1231.2	1221.8
47.5°	7901.1	4010.0	1480.9	1383.4	1452.8	1387.4	1323.3	1257.9	1213.8	1207.1
50°	8470.0	3645.4	1315.3	1283.2	1406.1	1375.4	1342.0	1273.9	1200.5	1192.4
52.5°	9159.0	3330.3	1185.8	1195.1	1370.0	1391.4	1390.1	1319.3	1191.1	1180.4
55°	9928.1	2980.4	1088.3	1123.0	1355.4	1420.8	1402.1	1362.0	1199.1	1183.1
57.5°	10685.3	2571.8	1020.2	1068.3	1334.0	1418.1	1344.7	1287.3	1217.8	1195.1
60°	11252.8	2023.0	968.1	1020.2	1287.3	1374.1	1281.9	1205.8	1213.8	1196.5
62.5°	11290.2	1563.7	905.4	978.8	1216.5	1330.0	1240.5	1169.7	1231.2	1215.1
65°	10626.5	1181.8	845.3	929.4	1140.4	1301.9	1200.5	1149.7	1267.2	1249.9
67.5°	8946.7	950.8	794.5	878.6	1064.3	1243.2	1164.4	1131.0	1299.3	1268.6
70°	6459.0	810.5	745.1	817.2	996.2	1176.4	1132.4	1097.6	1212.5	1164.4
72.5°	3976.6	702.4	689.0	735.8	944.1	1107.0	1084.3	1034.9	1092.3	1053.6
75°	1985.6	608.9	626.3	655.6	870.6	1028.2	1004.2	954.8	962.8	954.8
77.5°	950.8	520.8	552.8	575.5	775.8	938.7	913.4	862.6	853.3	854.6
80°	602.2	435.3	466.0	482.1	693.0	834.6	809.2	758.5	865.3	802.5
82.5°	376.6	353.9	361.9	391.3	603.6	726.4	693.0	647.6	779.8	616.9
85°	208.3	247.0	257.7	283.1	464.7	607.6	574.2	516.8	463.4	455.3
87.5°	124.2	146.9	150.9	169.6	312.5	439.3	388.6	368.6	305.8	304.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)