

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: P648391

Luminaire Tested: **GALN-SA4B-835-U-T2R-GRSBK**

Issue Date: 5/27/2021

Test Information

Test Method: LM-79-08
Report Number: P648391
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-057-9)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-835-U-T2R-GRSBK
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3500K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH BLACK GLARE REDUCTION SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11657.3 lumens
Efficiency: N/A
Efficacy: 71.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type I - Short
BUG Rating: B2 - U0 - G1

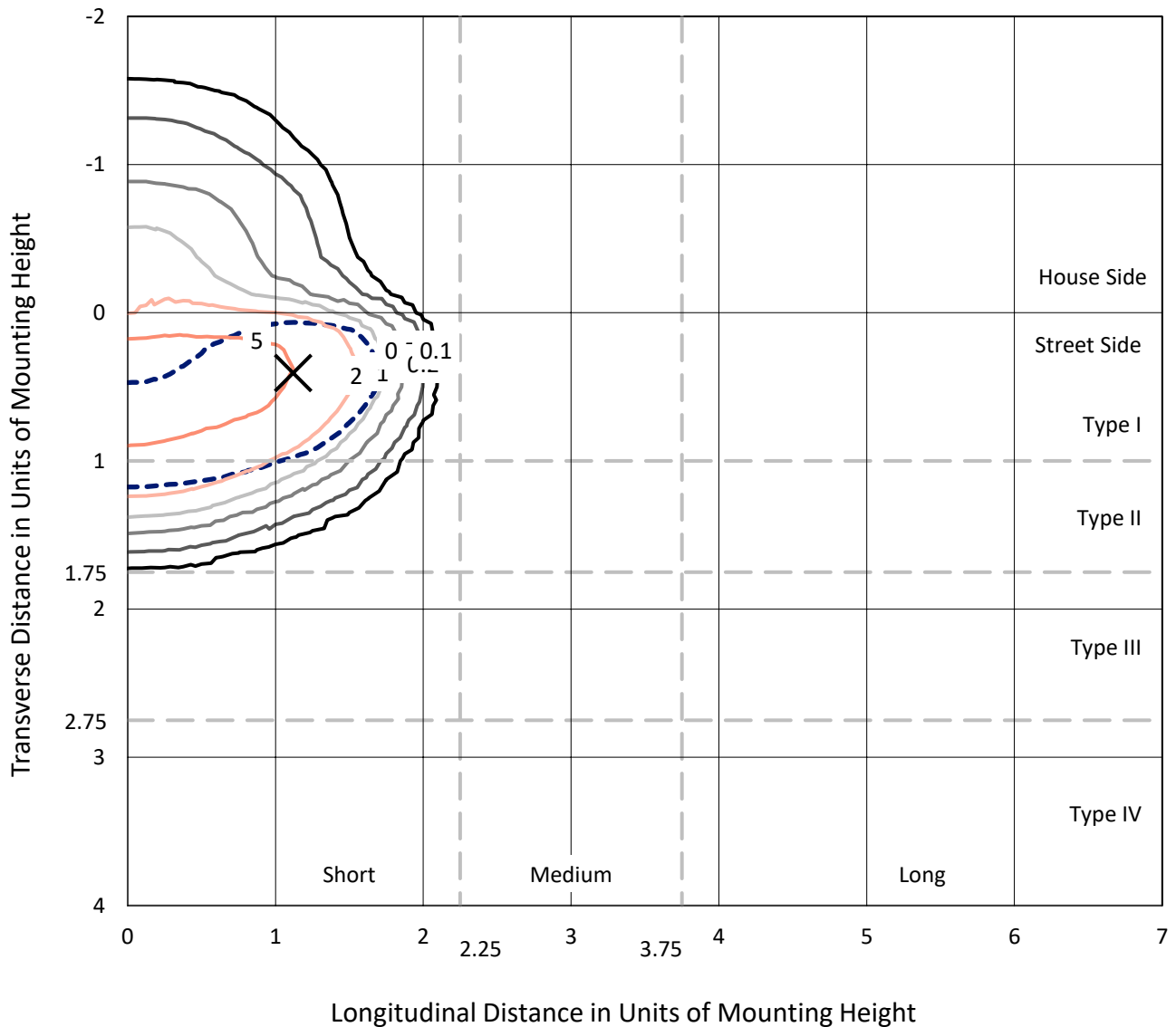
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

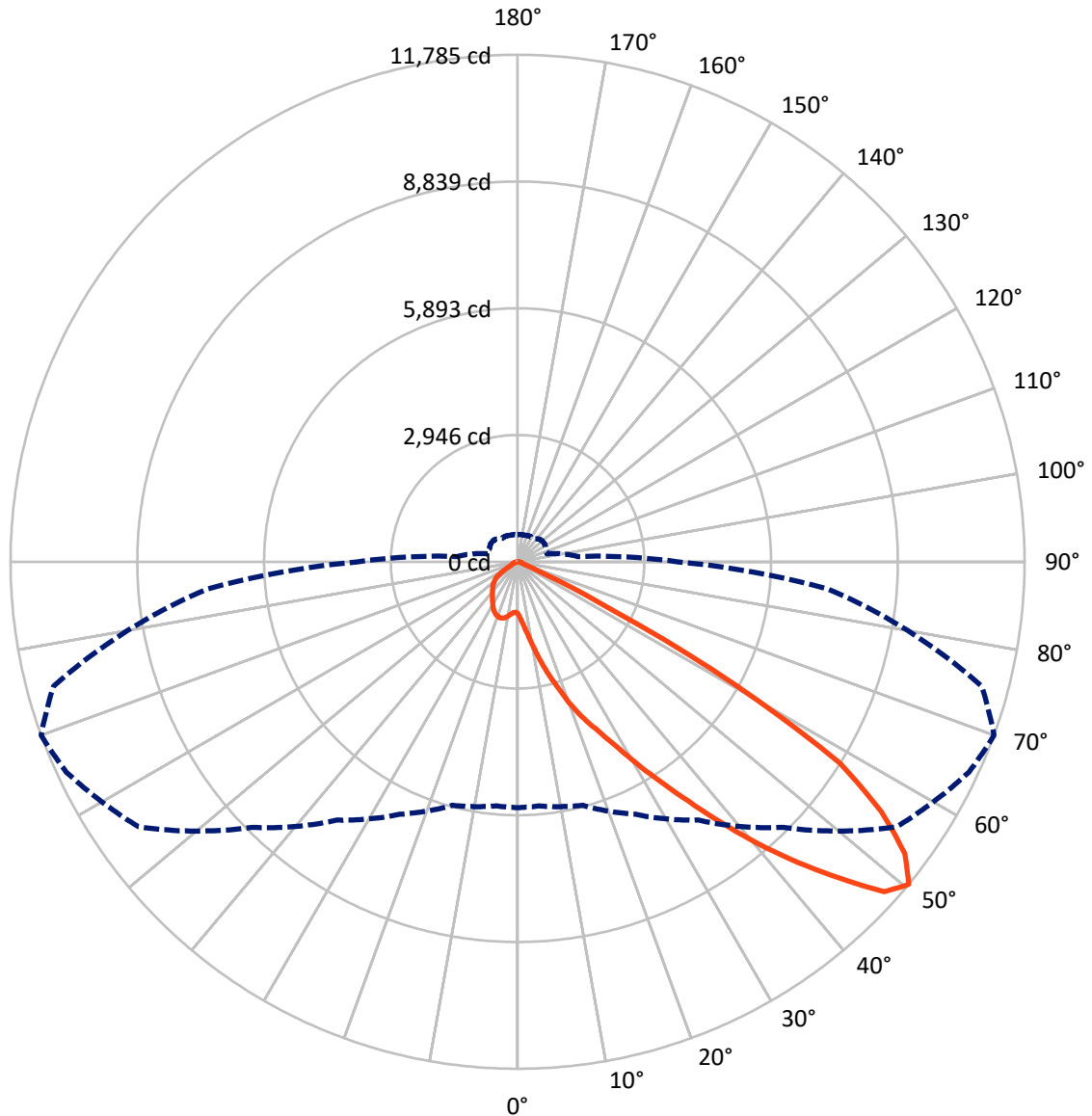
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 50-Deg Vertical

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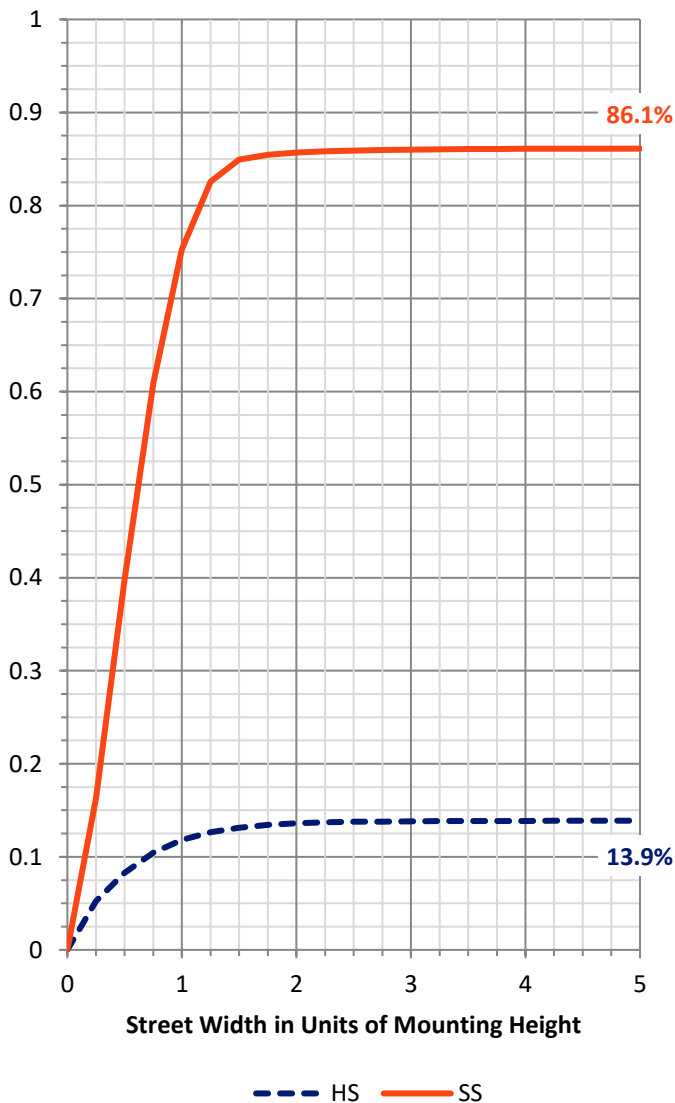
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1628.0	0.0	1628.0
	% Fixture	14.0	0.0	14.0
Street Side	Lumens	10029.3	0.0	10029.3
	% Fixture	86.0	0.0	86.0
Total	Lumens	11657.3	0.0	11657.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.0	1.3
10°-20°	679.2	5.8
20°-30°	1424.8	12.2
30°-40°	2455.9	21.1
40°-50°	3589.3	30.8
50°-60°	2795.5	24.0
60°-70°	473.6	4.1
70°-80°	65.1	0.6
80°-90°	16.8	0.1
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°	11657.3	100.0
0°-180°	11657.3	100.0

Coefficient of Utilization



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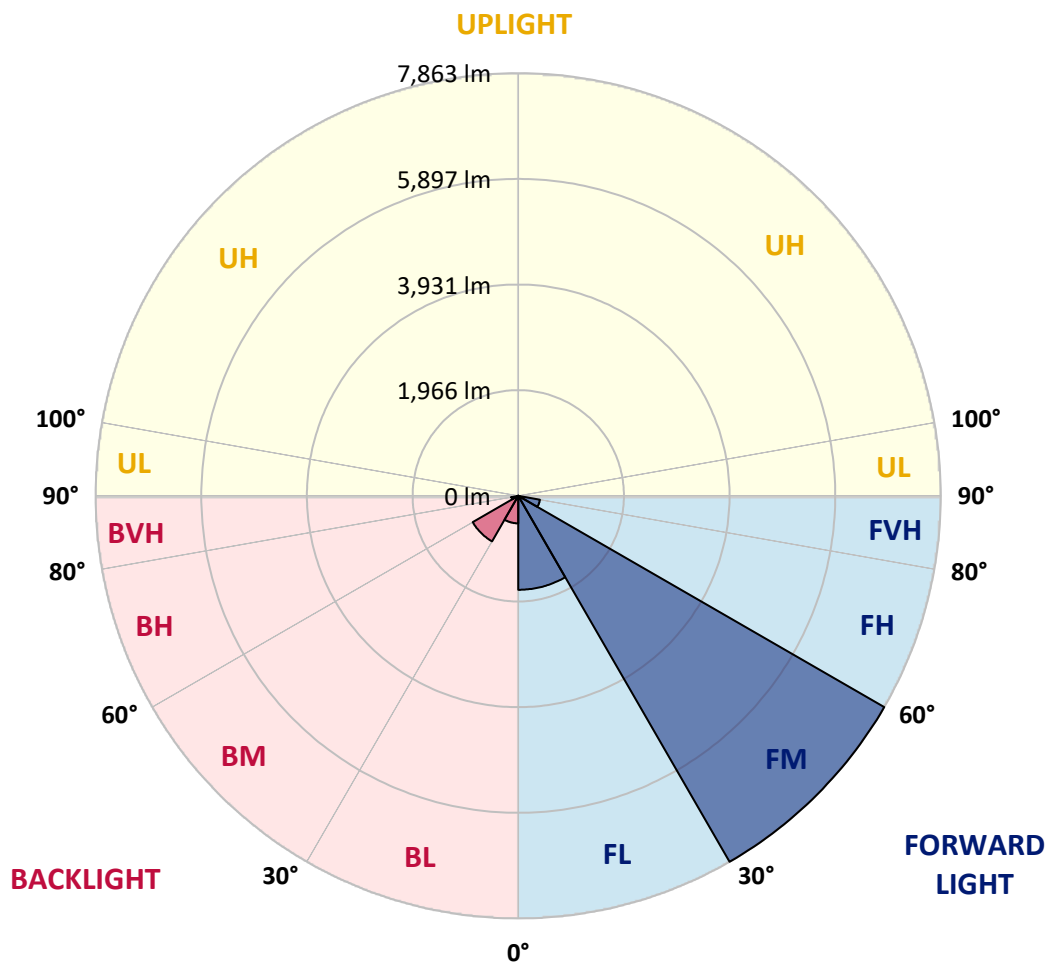
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1748.7	15.0			
FM (30°-60°)	7862.7	67.4			
FH (60°-80°)	410.1	3.5			G0/660
FVH (80°-90°)	7.8	0.1			G0/10
BL (0°-30°)	512.3	4.4	B2/1000		
BM (30°-60°)	978.1	8.4	B1/1000		
BH (60°-80°)	128.6	1.1	B1/500		G1/500
BVH (80°-90°)	9.1	0.1			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5
2.5°	1581.2	1569.7	1544.8	1498.8	1479.6	1433.6	1406.8	1355.1	1322.5	1286.1	1245.8
5°	2227.1	2167.7	2131.2	2079.5	1928.1	1834.2	1679.0	1546.7	1485.4	1418.3	1326.3
7.5°	2894.1	2855.8	2806.0	2694.8	2591.3	2395.7	2129.4	1838.0	1713.4	1598.5	1416.4
10°	3446.1	3338.7	3333.0	3250.5	3137.5	2903.7	2583.6	2221.4	1999.0	1830.3	1544.8
12.5°	3831.3	3733.6	3777.7	3768.0	3662.6	3448.0	3078.1	2598.9	2367.0	2104.5	1677.0
15°	4182.1	4141.8	4128.4	4116.9	4074.7	3915.6	3584.1	3058.9	2723.5	2407.3	1826.5
17.5°	4525.1	4421.6	4471.5	4481.0	4477.2	4333.4	4023.0	3495.9	3101.1	2727.3	1983.7
20°	4829.9	4839.5	4772.4	4758.9	4747.5	4741.7	4438.9	3929.1	3564.9	3062.8	2188.8
22.5°	5220.9	5153.8	5213.2	5174.8	5100.1	5054.1	4822.2	4312.4	3967.4	3467.1	2397.7
25°	5682.8	5736.4	5596.5	5581.1	5498.8	5339.7	5130.8	4741.7	4354.6	3842.8	2623.8
27.5°	6252.0	6158.1	6121.7	6037.3	5887.8	5820.7	5575.4	5184.5	4822.2	4237.6	2842.4
30°	6740.8	6715.8	6533.7	6434.1	6303.8	6301.8	5958.8	5784.3	5431.7	4856.7	3143.3
32.5°	7139.4	7030.2	6963.1	6894.1	6788.6	6817.4	6528.0	6436.0	6081.4	5431.7	3497.8
35°	7405.8	7327.2	7287.0	7181.5	7150.9	7279.3	7158.6	7120.2	6828.9	6240.5	3913.7
37.5°	7490.1	7515.1	7507.4	7375.2	7440.3	7787.2	7942.4	7842.8	7689.5	7093.4	4364.1
40°	7564.9	7582.1	7543.8	7699.0	7885.0	8279.8	8841.3	8676.5	8619.0	7957.8	4990.8
42.5°	7607.1	7593.6	7593.6	7861.9	8143.7	8937.2	9709.6	9600.3	9556.2	8877.7	5715.4
45°	7425.0	7294.7	7434.6	7798.7	8366.0	9261.1	10403.4	10554.8	10491.6	9972.1	6562.5
47.5°	6744.6	6825.1	6903.6	7390.5	8095.8	9161.4	10828.9	11344.4	11461.3	10892.2	7118.3
50°	5715.4	5698.1	5861.0	6474.3	7331.1	8732.1	10746.4	11572.5	11785.2	11168.1	7235.2
52.5°	4157.1	4283.6	4460.0	5069.5	6085.2	7620.5	9682.7	10984.1	11267.8	10828.9	7158.6
55°	2420.7	2280.8	2677.5	3193.1	4151.4	5747.9	8185.9	9736.4	10261.5	10211.7	6771.4
57.5°	969.8	939.1	1075.2	1448.9	2165.8	3563.0	5953.0	7999.9	8841.3	9353.1	5951.1
60°	425.5	415.9	488.7	590.3	885.5	1642.6	3256.3	4975.5	5853.3	6535.6	4095.8
62.5°	306.6	302.8	339.3	375.7	467.7	714.9	1368.4	2004.8	2499.3	3018.7	1834.2
65°	247.3	256.8	281.7	300.9	345.0	396.7	483.0	557.7	684.3	709.2	404.4
67.5°	201.2	208.9	231.9	253.0	260.7	214.7	222.3	195.5	195.5	174.4	139.9
70°	147.6	149.5	176.3	201.2	161.0	86.3	151.4	151.4	136.1	130.3	118.9
72.5°	109.2	111.2	132.2	124.6	63.3	53.6	111.2	122.7	111.2	105.4	95.8
75°	80.5	82.4	69.0	28.7	26.9	34.5	65.1	84.3	80.5	78.6	72.8
77.5°	15.3	11.5	9.6	13.4	19.2	28.7	42.2	51.8	53.6	57.5	53.6
80°	1.9	1.9	5.7	11.5	21.1	30.7	44.1	49.8	51.8	53.6	49.8
82.5°	0.0	1.9	5.7	11.5	21.1	28.7	38.4	44.1	47.9	49.8	47.9
85°	0.0	1.9	3.8	9.6	17.2	21.1	19.2	13.4	11.5	13.4	9.6
87.5°	0.0	0.0	1.9	1.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5	1207.5
2.5°	1222.8	1215.1	1188.3	1159.5	1134.6	1146.2	1134.6	1125.0	1128.9	1125.0	1121.3
5°	1289.9	1255.4	1197.9	1172.9	1151.9	1150.0	1144.2	1142.3	1144.2	1144.2	1127.0
7.5°	1353.1	1297.5	1236.2	1209.4	1184.4	1186.4	1172.9	1172.9	1171.1	1161.5	1157.7
10°	1448.9	1374.2	1295.6	1247.7	1217.0	1211.3	1197.9	1184.4	1184.4	1184.4	1165.3
12.5°	1554.4	1460.5	1353.1	1297.5	1261.1	1232.4	1211.3	1207.5	1186.4	1182.6	1172.9
15°	1646.3	1527.6	1391.5	1314.8	1268.8	1230.5	1197.9	1176.8	1167.2	1161.5	1153.8
17.5°	1736.5	1585.0	1412.5	1314.8	1264.9	1220.9	1186.4	1167.2	1144.2	1148.0	1132.7
20°	1857.2	1646.3	1418.3	1289.9	1228.5	1186.4	1140.4	1130.8	1117.4	1105.9	1109.7
22.5°	1974.1	1690.4	1401.0	1259.2	1171.1	1121.3	1098.2	1086.7	1080.9	1071.4	1058.0
25°	2079.5	1738.3	1374.2	1203.6	1109.7	1073.3	1052.2	1050.3	1036.9	1036.9	1011.9
27.5°	2186.8	1755.6	1328.2	1138.5	1056.0	1035.0	1025.4	1021.6	1015.8	1002.4	985.2
30°	2309.5	1761.4	1261.1	1071.4	1008.1	985.2	998.6	1008.1	983.2	958.3	966.0
32.5°	2411.1	1748.0	1180.6	1008.1	973.7	962.2	989.0	998.6	969.8	943.0	929.6
35°	2533.8	1715.4	1102.1	958.3	939.1	962.2	985.2	985.2	927.6	895.0	887.4
37.5°	2719.7	1679.0	1029.3	916.1	902.7	950.6	981.3	960.2	870.1	829.9	820.3
40°	2919.0	1656.0	958.3	874.0	883.5	931.5	948.8	883.5	791.5	766.6	759.0
42.5°	3208.4	1609.9	895.0	837.6	866.3	904.7	904.7	787.7	753.2	739.8	737.9
45°	3568.8	1577.4	839.5	806.9	841.4	851.0	820.3	737.9	713.0	709.2	711.0
47.5°	3745.1	1514.1	782.0	770.5	795.4	797.3	716.8	697.7	676.6	670.8	667.0
50°	3718.2	1401.0	707.2	722.6	757.1	737.9	653.6	657.4	638.2	636.3	626.7
52.5°	3530.4	1222.8	632.5	668.9	707.2	651.6	601.8	598.0	598.0	573.1	563.4
55°	3129.8	985.2	542.4	588.4	634.4	548.2	534.7	530.9	521.3	498.3	492.6
57.5°	2478.2	722.6	408.3	458.1	538.5	465.7	463.8	446.5	421.6	404.4	404.4
60°	1473.8	415.9	256.8	279.8	356.5	377.6	419.8	412.1	369.9	343.1	335.4
62.5°	672.8	214.7	162.9	166.8	191.7	245.3	329.6	381.4	322.0	276.0	272.2
65°	226.1	159.1	134.1	128.4	132.2	147.6	197.4	270.2	256.8	212.7	205.1
67.5°	138.0	141.8	126.5	116.9	116.9	115.0	113.1	122.7	151.4	147.6	149.5
70°	118.9	130.3	116.9	105.4	101.6	95.8	80.5	67.1	57.5	67.1	70.9
72.5°	95.8	103.5	99.7	90.0	80.5	72.8	57.5	44.1	32.6	28.7	28.7
75°	70.9	76.7	80.5	69.0	61.3	51.8	42.2	28.7	17.2	11.5	11.5
77.5°	51.8	57.5	59.4	53.6	46.0	36.4	26.9	19.2	9.6	3.8	3.8
80°	44.1	51.8	57.5	53.6	47.9	34.5	24.9	13.4	7.7	1.9	1.9
82.5°	42.2	51.8	57.5	51.8	46.0	32.6	24.9	15.3	5.7	1.9	1.9
85°	9.6	13.4	17.2	21.1	24.9	24.9	19.2	11.5	5.7	1.9	1.9
87.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	1.9	1.9	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)