

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: P452782

Luminaire Tested: **GALN-SA3D-730-U-SL4**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P452782  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: GALN-SA3D-730-U-SL4  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 20586 lumens  
Efficiency: N/A  
Efficacy: 111.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G4

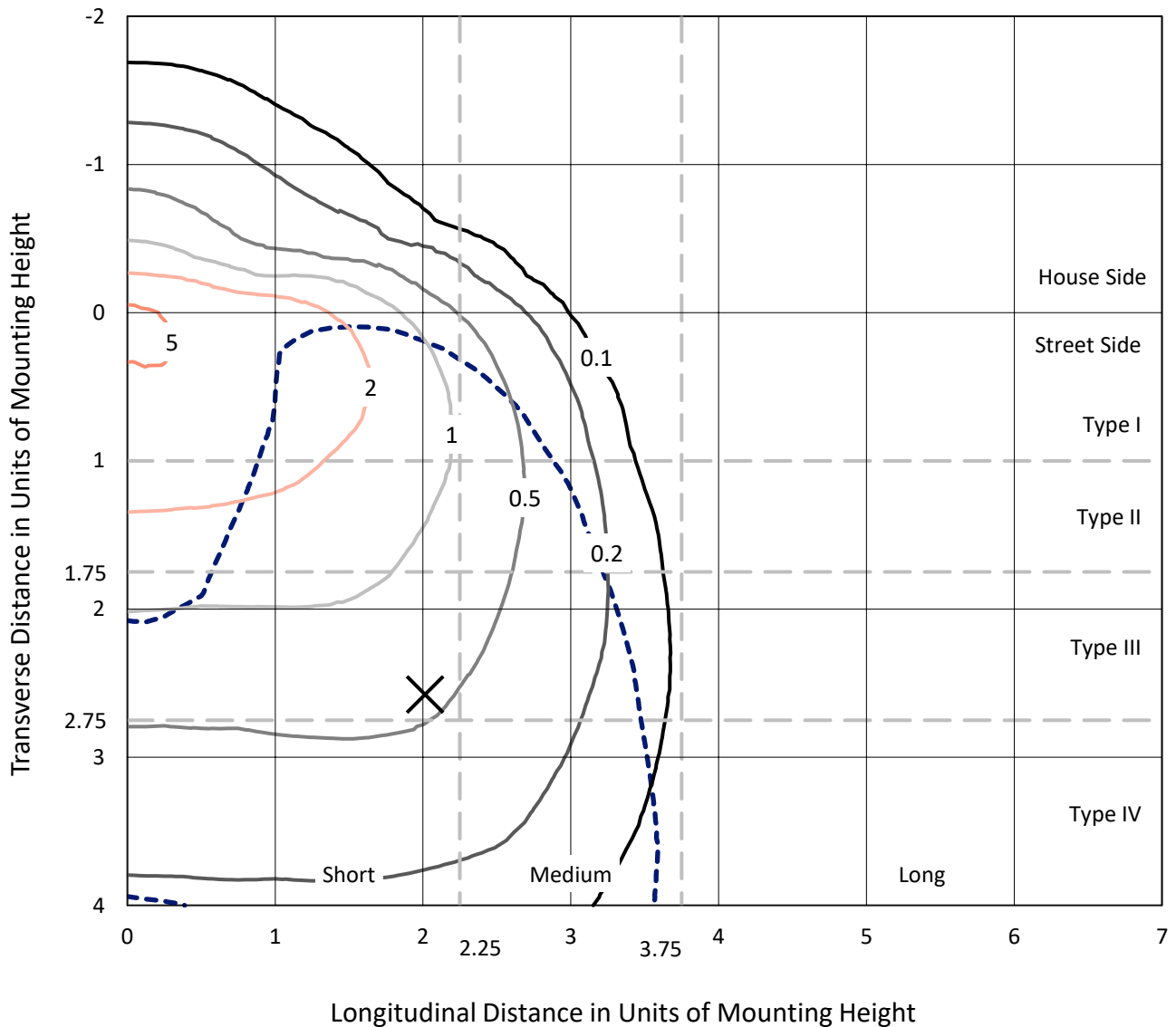
Input Watts (W): 184  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

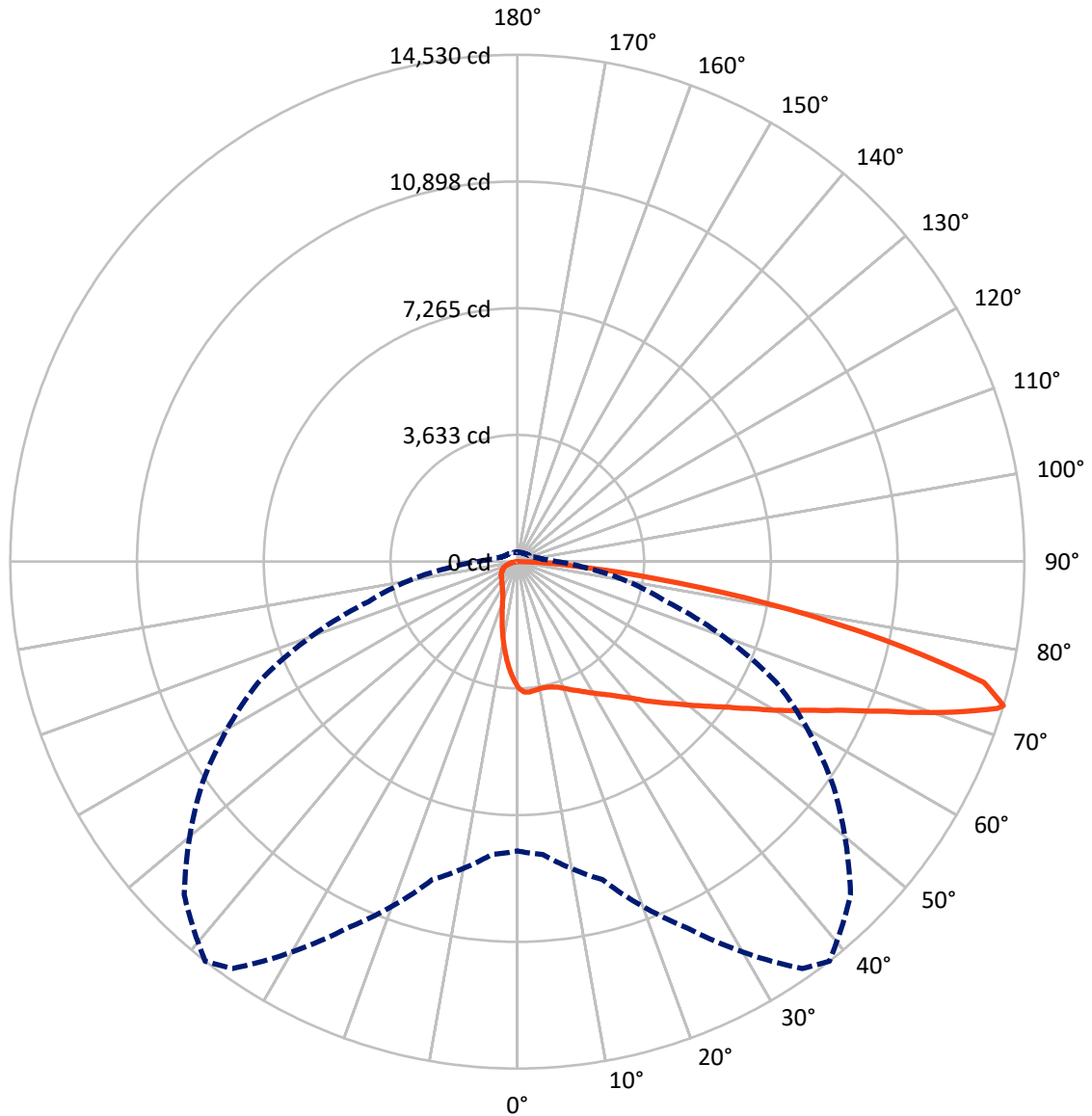
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 38-Deg Lateral    - - - Horizontal Cone Through 73-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2767.4	0.0	2767.4
	% Fixture	13.4	0.0	13.4
<b>Street Side</b>	Lumens	17818.6	0.0	17818.6
	% Fixture	86.6	0.0	86.6
<b>Total</b>	Lumens	20586.0	0.0	20586.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	315.7	1.5
10°-20°	809.5	3.9
20°-30°	1260.6	6.1
30°-40°	1849.0	9.0
40°-50°	2742.8	13.3
50°-60°	3886.0	18.9
60°-70°	4929.5	23.9
70°-80°	4103.4	19.9
80°-90°	689.4	3.3
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°	20586.0	100.0
0°-180°	20586.0	100.0

**Coefficient of Utilization**



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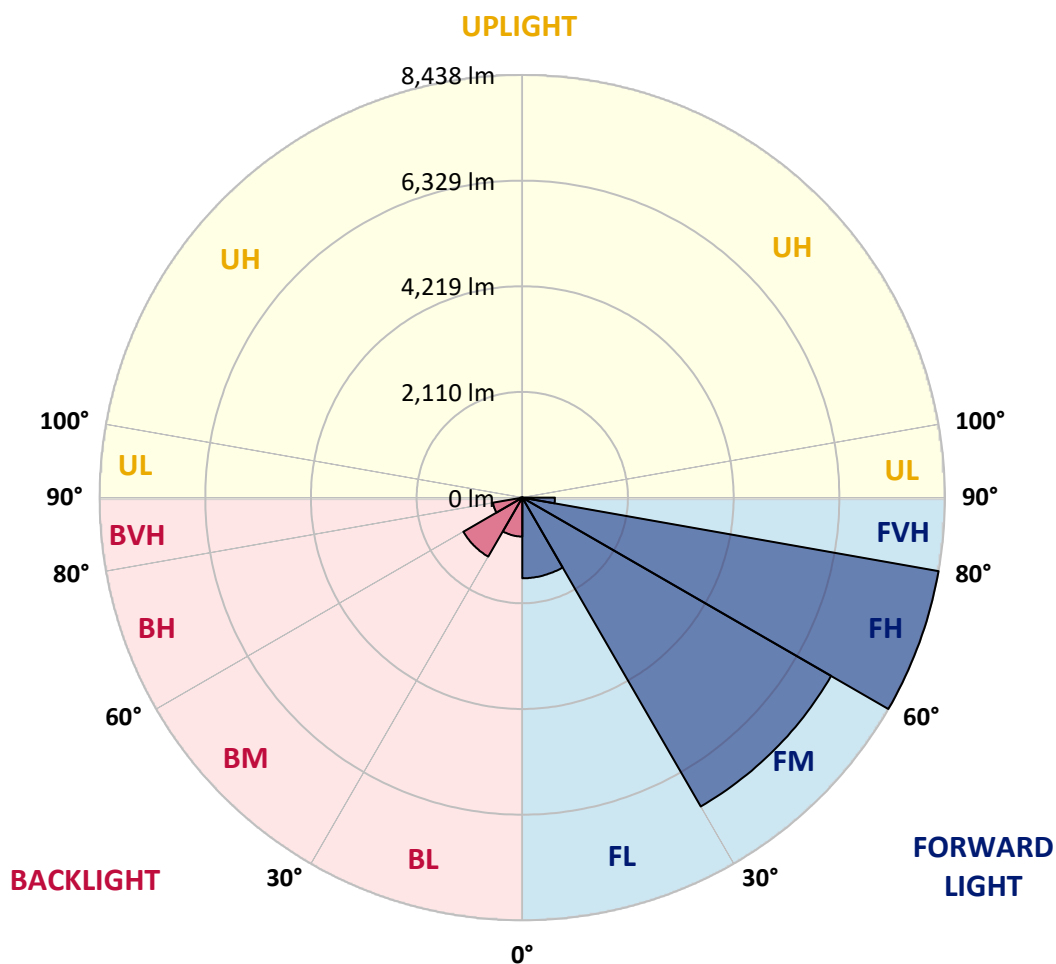
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1609.3	7.8			
FM	(30°-60°)	7119.2	34.6			
FH	(60°-80°)	8438.1	41.0			G4/12000
FVH	(80°-90°)	652.1	3.2			G4/750
BL	(0°-30°)	776.6	3.8	B2/1000		
BM	(30°-60°)	1358.6	6.6	B2/2500		
BH	(60°-80°)	594.8	2.9	B2/1000		G2/1000
BVH	(80°-90°)	37.4	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	38°	45°	55°	65°	75°	85°
0°	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6
2.5°	3761.9	3780.5	3771.2	3758.4	3750.3	3742.2	3730.5	3696.8	3670.1	3641.0	3595.7
5°	3789.8	3801.5	3793.3	3777.0	3758.4	3750.3	3728.2	3684.0	3641.0	3592.2	3524.8
7.5°	3773.6	3778.2	3768.9	3749.1	3732.9	3717.8	3692.2	3643.3	3591.0	3531.7	3443.4
10°	3715.4	3732.9	3732.9	3716.6	3700.3	3692.2	3666.6	3620.1	3572.4	3505.0	3400.4
12.5°	3667.8	3686.4	3701.5	3696.8	3695.7	3695.7	3675.9	3641.0	3585.2	3521.3	3396.9
15°	3635.2	3657.3	3689.9	3708.5	3720.1	3723.6	3715.4	3685.2	3628.2	3553.8	3410.8
17.5°	3628.2	3655.0	3714.3	3755.0	3785.2	3784.0	3781.7	3739.8	3677.1	3600.3	3428.3
20°	3659.6	3694.5	3777.0	3841.0	3885.2	3877.0	3864.2	3809.6	3736.4	3650.3	3444.6
22.5°	3753.8	3789.8	3880.5	3950.3	3993.3	3993.3	3954.9	3882.8	3804.9	3708.5	3466.6
25°	3888.6	3928.2	4024.7	4095.6	4115.3	4100.2	4061.9	3974.7	3885.2	3792.2	3513.1
27.5°	4053.7	4101.4	4190.9	4250.2	4244.4	4232.7	4193.2	4081.6	3992.1	3907.2	3592.2
30°	4259.5	4294.4	4387.4	4401.3	4380.4	4378.1	4322.3	4210.7	4127.0	4061.9	3705.0
32.5°	4453.6	4485.0	4559.4	4565.2	4528.0	4532.7	4480.4	4378.1	4330.4	4307.2	3894.5
35°	4659.4	4675.7	4739.6	4732.6	4708.2	4704.7	4683.8	4586.2	4601.3	4643.1	4163.0
37.5°	4831.4	4864.0	4900.0	4905.9	4904.7	4916.3	4930.3	4883.8	4971.0	5102.3	4515.2
40°	4989.6	5017.5	5070.9	5089.5	5134.9	5158.1	5205.8	5206.9	5408.1	5624.3	4948.9
42.5°	5096.5	5144.2	5244.1	5277.9	5388.3	5458.0	5529.0	5604.5	5896.3	6174.2	5460.4
45°	5189.5	5252.3	5418.5	5523.2	5673.1	5758.0	5907.9	6066.0	6485.7	6849.6	5980.0
47.5°	5330.2	5386.0	5576.6	5761.5	5988.2	6085.8	6310.2	6546.2	7094.9	7493.6	6477.6
50°	5525.5	5559.2	5753.3	6054.4	6343.9	6469.4	6765.9	7106.5	7745.9	8129.5	6914.7
52.5°	5775.4	5789.4	5944.0	6345.1	6726.4	6882.1	7275.1	7672.7	8315.5	8681.7	7261.1
55°	6070.7	6047.4	6168.4	6653.1	7163.5	7366.9	7788.9	8245.8	8956.1	9128.1	7513.4
57.5°	6362.5	6326.5	6422.9	7027.5	7702.9	7948.2	8439.9	8836.3	9528.0	9545.5	7690.1
60°	6671.7	6645.0	6760.1	7466.9	8364.4	8655.0	9109.5	9449.0	10081.4	9836.1	7718.0
62.5°	6989.1	6946.1	7110.0	7961.0	9109.5	9373.4	9814.0	10100.0	10624.3	9944.2	7449.5
65°	7297.2	7277.4	7530.8	8548.0	9958.2	10258.1	10685.9	10880.1	11059.1	9781.5	6783.3
67.5°	7625.0	7664.5	8069.1	9331.6	11064.9	11441.6	11903.1	11720.6	11183.5	9010.7	5712.6
70°	8124.9	8150.5	8775.9	10358.1	12491.3	12945.9	13169.1	12019.3	10583.6	7547.1	4294.4
72.5°	8339.9	8452.7	9407.1	11435.7	14111.9	14389.7	13594.6	11353.2	8816.6	5126.7	2256.5
73°	8292.3	8427.1	9436.2	11599.7	14238.6	14530.4	13503.9	11010.3	8195.8	4415.3	1934.4
75°	7698.2	7864.5	9058.4	11462.5	13992.1	13817.8	12046.1	9383.9	5538.3	2007.7	881.2
77.5°	6074.2	6121.8	7177.4	9256.0	11018.4	10695.2	9015.4	5864.9	2262.3	746.3	499.9
80°	3047.0	3222.5	4045.6	5302.3	7368.1	7262.3	5690.6	2773.8	942.8	438.3	331.3
82.5°	1465.9	1590.3	1970.5	2585.5	4071.2	3974.7	2818.0	1515.9	598.7	255.8	195.3
85°	944.0	1037.0	1254.4	1233.4	1674.0	1598.5	1266.0	1147.4	354.6	133.7	136.0
87.5°	623.1	682.4	818.4	654.5	609.2	551.0	559.2	646.4	69.8	51.2	18.6
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°	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6	3616.6
2.5°	3577.1	3562.0	3512.0	3463.2	3416.7	3372.5	3343.4	3305.1	3279.5	3286.5	3296.9
5°	3487.6	3453.9	3365.5	3279.5	3198.1	3101.6	3023.7	2960.9	2913.3	2895.8	2892.4
7.5°	3393.4	3336.4	3209.7	3062.1	2923.7	2804.0	2665.7	2597.1	2516.9	2489.0	2479.7
10°	3336.4	3259.7	3081.9	2876.1	2668.0	2469.2	2319.2	2197.2	2086.7	2065.8	2055.3
12.5°	3320.2	3219.0	2979.5	2714.5	2437.8	2193.7	1971.6	1811.2	1704.3	1679.8	1643.8
15°	3310.9	3185.3	2884.2	2551.7	2200.7	1903.1	1669.4	1482.2	1384.6	1319.5	1320.6
17.5°	3302.7	3147.0	2777.3	2373.9	1996.1	1653.1	1395.0	1226.5	1136.9	1102.1	1098.6
20°	3291.1	3101.6	2654.0	2186.7	1762.4	1425.3	1191.6	1066.0	1005.6	976.5	975.4
22.5°	3286.5	3057.4	2533.1	1996.1	1555.5	1249.7	1056.7	968.4	930.0	910.3	910.3
25°	3298.1	3026.0	2406.4	1814.7	1371.8	1099.7	963.7	903.3	881.2	870.7	867.2
27.5°	3334.1	3012.1	2280.9	1633.3	1203.2	997.4	901.0	859.1	842.8	834.7	835.9
30°	3402.7	3010.9	2157.6	1454.3	1077.7	919.6	851.0	821.9	809.1	804.5	803.3
32.5°	3513.1	3036.5	2036.7	1306.7	971.9	854.5	804.5	783.5	777.7	774.2	773.1
35°	3700.3	3108.6	1917.0	1171.8	890.5	796.3	760.3	749.8	741.7	745.2	746.3
37.5°	3952.6	3233.0	1803.1	1066.0	828.9	753.3	723.1	713.8	709.1	712.6	716.1
40°	4290.9	3412.0	1707.7	981.2	784.7	717.3	690.5	682.4	677.8	683.6	684.7
42.5°	4664.0	3618.9	1628.7	914.9	748.7	687.1	661.5	652.2	648.7	652.2	653.3
45°	5047.7	3859.6	1588.0	867.2	718.4	665.0	638.2	627.8	619.6	617.3	620.8
47.5°	5425.5	4068.8	1586.8	838.2	694.0	645.2	616.1	604.5	594.0	588.2	587.1
50°	5733.6	4235.1	1614.7	825.4	673.1	623.1	594.0	582.4	568.5	556.8	559.2
52.5°	5966.1	4343.2	1627.5	819.6	661.5	599.9	570.8	560.3	544.1	528.9	528.9
55°	6116.0	4368.8	1596.1	813.8	652.2	575.4	544.1	534.8	518.5	503.4	503.4
57.5°	6167.2	4289.7	1483.4	799.8	642.9	554.5	517.3	509.2	496.4	481.3	479.0
60°	6048.6	4022.3	1285.8	758.0	624.3	532.4	488.3	484.8	480.1	467.3	466.2
62.5°	5591.7	3455.0	1070.7	703.3	592.9	509.2	461.5	467.3	470.8	463.8	462.7
65°	4831.4	2805.2	914.9	627.8	551.0	476.6	432.5	447.6	456.9	456.9	454.5
67.5°	3918.9	2154.2	770.8	562.7	498.7	432.5	399.9	411.5	418.5	416.2	422.0
70°	2785.4	1459.0	627.8	488.3	432.5	382.5	358.1	358.1	353.4	351.1	351.1
72.5°	1350.9	833.5	509.2	408.0	368.5	326.7	306.9	298.8	289.5	288.3	282.5
73°	1128.8	747.5	485.9	392.9	353.4	318.5	296.4	283.7	277.8	273.2	272.0
75°	687.1	567.3	405.7	331.3	301.1	274.4	254.6	243.0	237.2	233.7	232.5
77.5°	452.2	423.2	315.0	253.4	230.2	213.9	205.8	194.1	190.7	186.0	186.0
80°	337.1	323.2	225.5	179.0	165.1	151.1	148.8	146.5	137.2	131.4	129.0
82.5°	217.4	230.2	153.5	119.7	104.6	93.0	94.2	97.7	88.4	80.2	77.9
85°	154.6	166.2	93.0	54.6	44.2	38.4	43.0	38.4	39.5	31.4	25.6
87.5°	25.6	44.2	16.3	7.0	3.5	2.3	0.0	0.0	0.0	0.0	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)