

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: P458491

Luminaire Tested: **GALN-SA9D-830-U-SL2**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA9D-830-U-SL2
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 80 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55628 lumens
Efficiency: N/A
Efficacy: 100.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 552
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

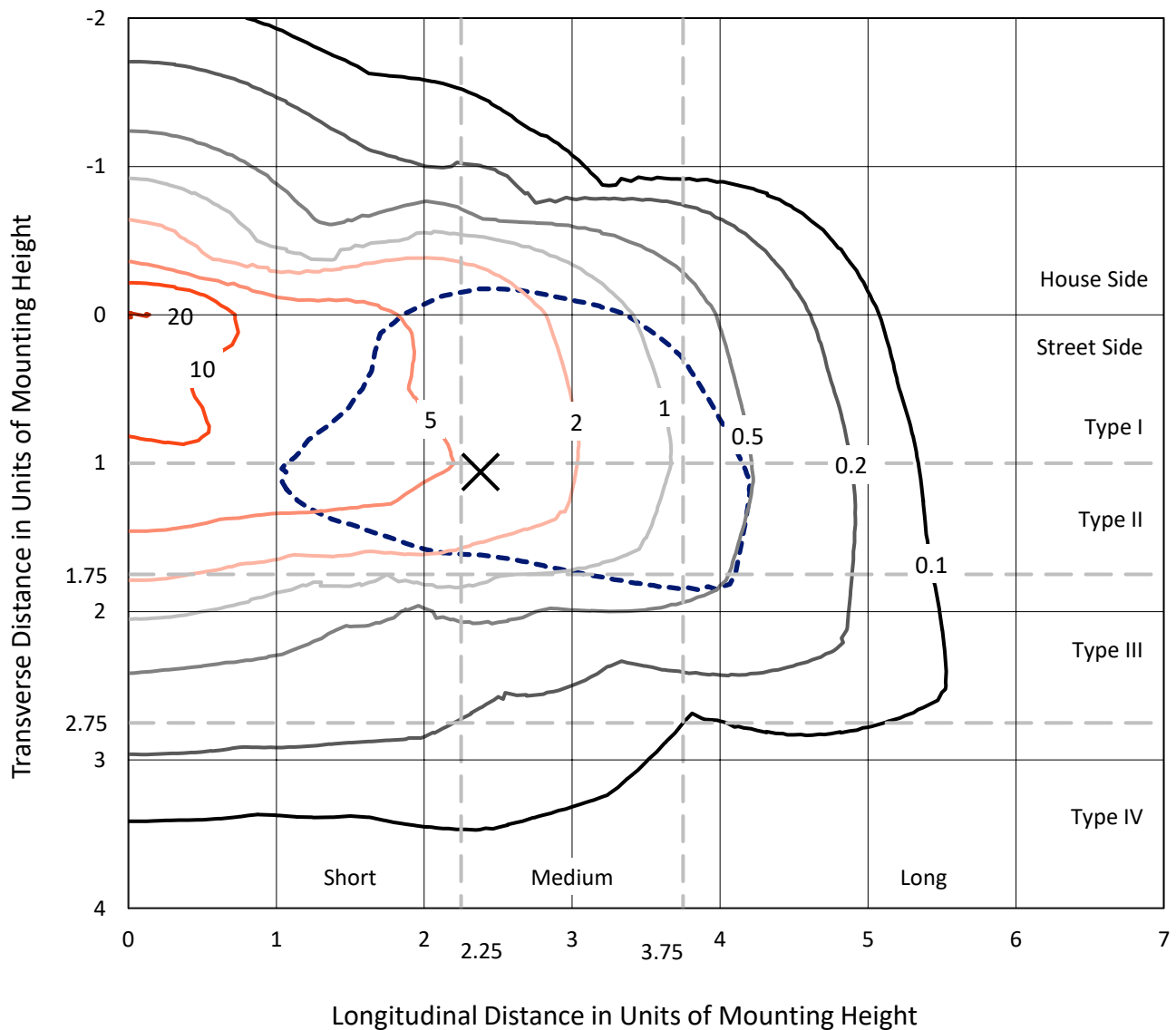


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

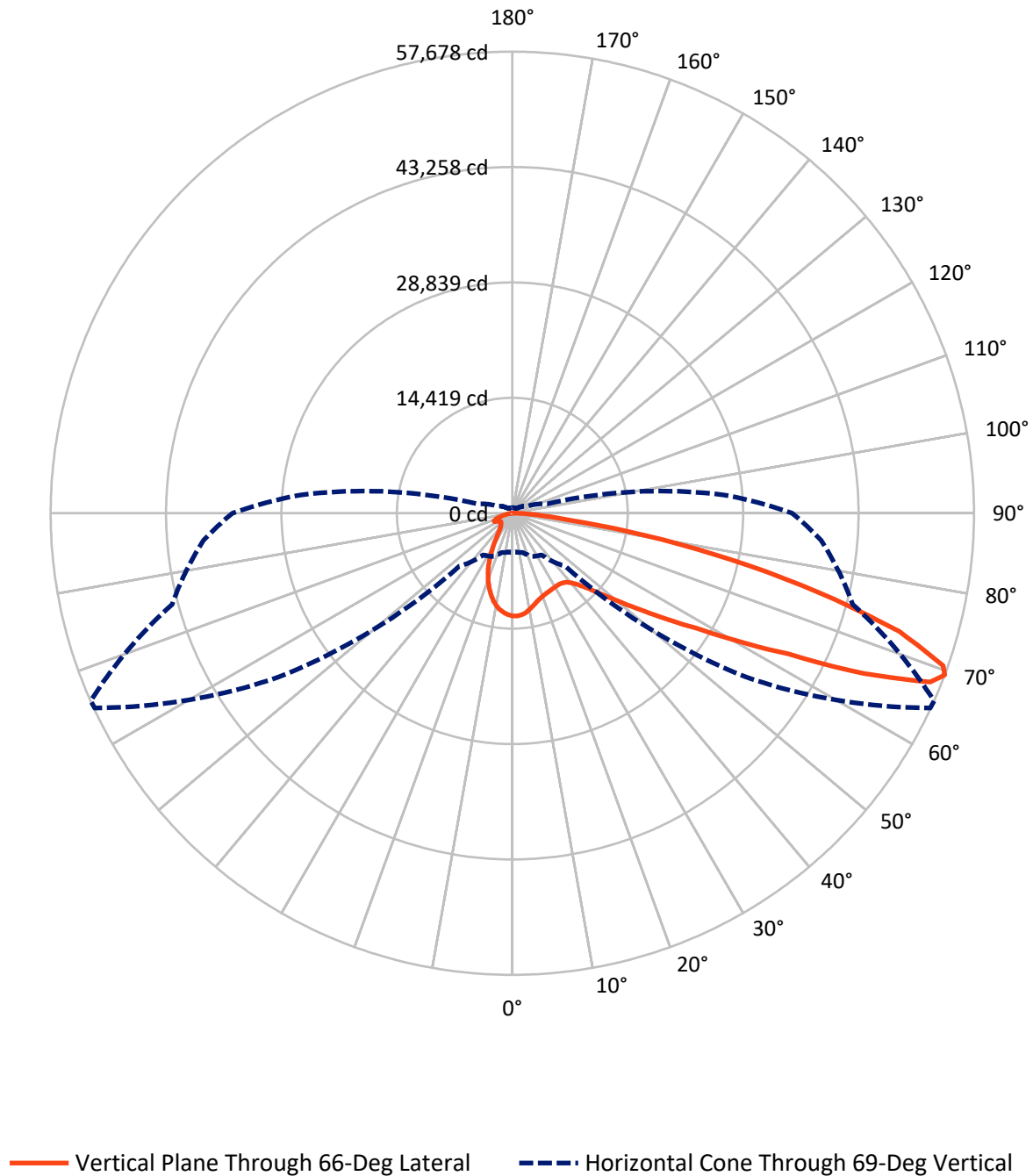


Based on 25 foot mounting height. Maximum calculated value = 20.6 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10461.5	0.0	10461.5
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	45166.5	0.0	45166.5
	% Fixture	81.2	0.0	81.2
Total	Lumens	55628.0	0.0	55628.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1115.5	2.0
10°-20°	2646.0	4.8
20°-30°	3602.1	6.5
30°-40°	4840.5	8.7
40°-50°	7227.7	13.0
50°-60°	11496.8	20.7
60°-70°	14140.4	25.4
70°-80°	9200.4	16.5
80°-90°	1358.6	2.4
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°	55628.0	100.0
0°-180°	55628.0	100.0

Coefficient of Utilization



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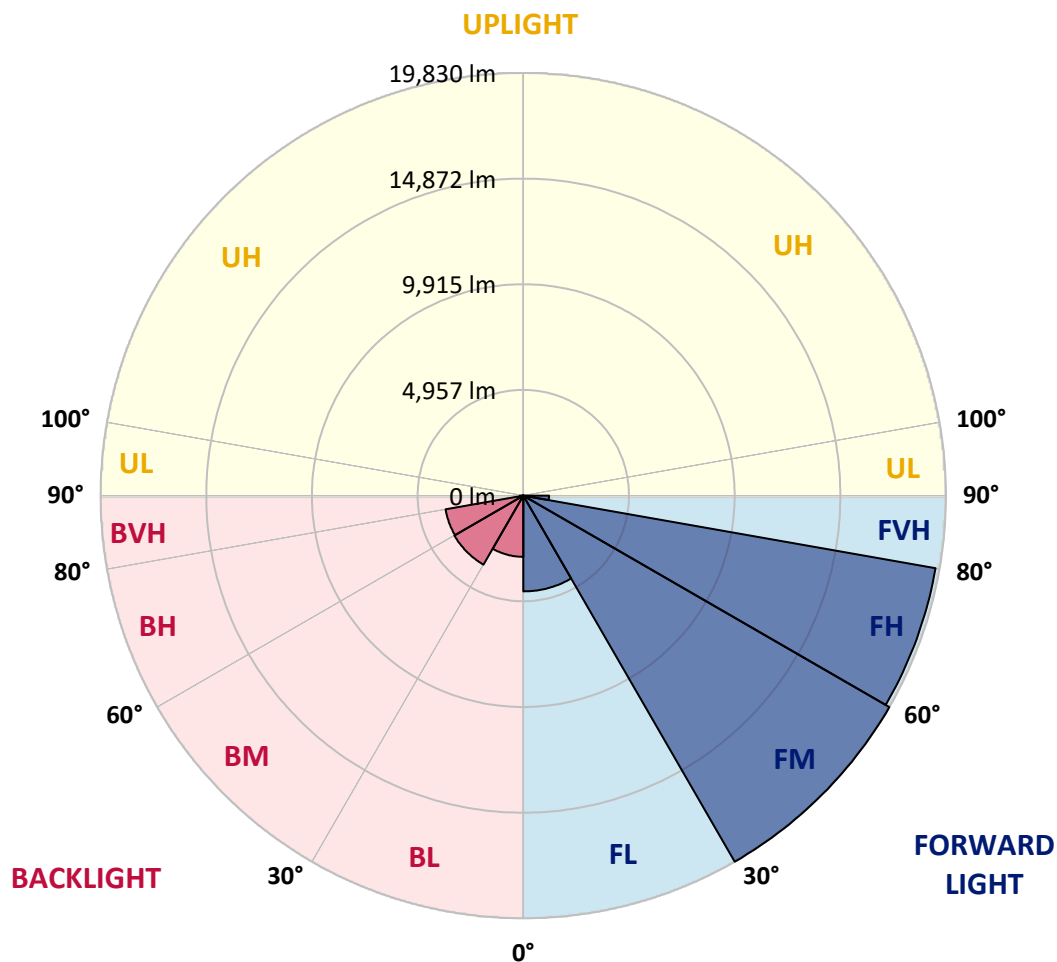
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4491.9	8.1			
FM	(30°-60°)	19829.7	35.6			
FH	(60°-80°)	19637.0	35.3			G5
FVH	(80°-90°)	1207.9	2.2			G5
BL	(0°-30°)	2871.7	5.2	B4/5000		
BM	(30°-60°)	3735.2	6.7	B3/5000		
BH	(60°-80°)	3703.8	6.7	B4/5000		G4/5000
BVH	(80°-90°)	150.7	0.3			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1
2.5°	12396.3	12445.6	12501.0	12562.6	12679.7	12744.4	12790.6	12843.0	12849.1	12876.9	12855.3
5°	11481.4	11539.9	11623.1	11740.1	11915.7	12189.9	12473.3	12704.3	12732.1	12861.5	12898.4
7.5°	10717.4	10751.3	10819.0	11006.9	11256.5	11561.4	11974.2	12442.5	12510.3	12818.3	12926.1
10°	10095.1	10129.0	10209.1	10403.1	10649.6	11031.6	11484.4	12100.5	12156.0	12685.9	12932.3
12.5°	9629.9	9660.7	9747.0	9938.0	10221.4	10578.7	11077.8	11730.9	11811.0	12510.3	12873.8
15°	9275.6	9334.2	9405.0	9562.1	9861.0	10206.0	10689.6	11392.0	11456.7	12325.4	12833.7
17.5°	9124.7	9152.4	9201.7	9346.5	9565.2	9904.1	10390.8	11127.1	11204.1	12196.0	12824.5
20°	9130.9	9158.6	9167.8	9247.9	9405.0	9697.7	10178.3	10917.6	11010.0	12082.1	12839.9
22.5°	9340.3	9343.4	9309.5	9281.8	9343.4	9586.8	10027.3	10760.5	10868.3	12032.8	12852.2
25°	9663.8	9719.3	9670.0	9540.6	9426.6	9543.7	9968.8	10674.2	10775.9	11961.9	12836.8
27.5°	10187.5	10196.7	10156.7	9981.1	9685.4	9599.1	9944.1	10609.5	10695.8	11909.6	12759.8
30°	10889.9	10862.2	10825.2	10631.1	10165.9	9811.7	9996.5	10551.0	10640.4	11832.5	12667.4
32.5°	11601.5	11687.7	11653.9	11425.9	10822.1	10224.5	10165.9	10544.9	10618.8	11774.0	12565.7
35°	12356.2	12396.3	12556.5	12439.4	11820.2	10893.0	10483.2	10640.4	10698.9	11777.1	12494.9
37.5°	12947.7	13055.5	13431.4	13533.0	12950.8	11777.1	10997.7	10911.4	10936.1	11928.0	12522.6
40°	13662.4	13847.2	14330.9	14746.8	14364.8	12926.1	11872.6	11413.6	11444.4	12291.5	12704.3
42.5°	14568.1	14697.5	15347.5	15911.2	15849.6	14444.9	12932.3	12236.1	12251.5	13015.5	13212.6
45°	15627.8	15812.7	16542.8	17389.9	17534.7	16163.8	14463.4	13480.7	13471.4	14139.9	14161.5
47.5°	16983.3	17097.3	17821.2	18745.4	19330.7	18323.3	16321.0	15267.4	15168.8	15778.8	15603.2
50°	18230.9	18409.6	18957.9	19968.4	21425.5	20852.5	18763.9	17584.0	17353.0	17922.9	17627.1
52.5°	18754.6	18942.5	19404.6	20658.4	23221.5	24124.1	21866.0	20347.3	19962.2	20399.7	20291.8
55°	17845.8	18089.2	18520.5	20045.4	24010.1	27897.8	26049.4	23541.9	23261.5	23073.6	23104.4
57.5°	15402.9	15634.0	16216.2	17898.2	23067.4	30636.4	32022.7	27648.3	27047.6	26181.9	26329.8
60°	11724.7	11869.5	12171.4	14035.2	20273.3	31348.1	38806.2	32839.1	32457.1	29277.9	29382.6
62.5°	8326.8	8490.1	8699.6	9629.9	14842.3	29342.6	44117.1	40087.7	38723.0	32484.8	32383.1
65°	6761.9	6651.0	6903.6	7338.0	8708.8	22740.9	45312.4	50148.9	48269.7	36708.3	35297.4
67.5°	5560.5	5443.4	5692.9	6466.2	6623.3	13200.3	41005.7	56679.7	56303.9	41301.4	38257.8
69°	4922.8	4861.2	5079.9	5960.9	6358.3	9374.2	35722.5	57588.5	57677.8	44009.3	38713.7
70°	4436.0	4460.7	4673.3	5705.2	6238.2	7729.2	30531.7	56334.7	57092.5	45361.7	38220.9
72.5°	3265.4	3317.8	3613.5	4725.6	6124.2	6558.6	18169.3	49206.2	50546.3	45441.7	34964.7
75°	2282.7	2258.1	2519.9	3558.1	5785.3	6500.0	10671.2	38054.5	39573.2	39277.5	29379.6
77.5°	1494.1	1534.1	1743.6	2513.8	4867.3	6450.8	6956.0	26998.3	27984.1	26268.2	17377.6
80°	1053.6	1050.5	1167.5	1715.9	3610.4	6198.1	5696.0	17017.2	16767.6	10323.0	5153.8
82.5°	603.8	646.9	782.5	1207.6	2415.2	5455.7	5240.1	8138.9	7430.4	2942.0	1740.5
85°	335.8	351.2	465.2	730.1	1410.9	4109.5	4574.7	3702.9	3493.4	1229.2	748.6
87.5°	107.8	117.1	194.1	369.7	640.8	1940.8	2590.8	1709.7	1577.3	443.6	301.9
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°	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1	12846.1
2.5°	12864.5	12901.5	12802.9	12707.4	12621.2	12501.0	12393.2	12303.9	12242.3	12233.0	12202.2
5°	12907.7	12910.7	12722.8	12470.2	12223.8	11952.7	11672.3	11472.1	11284.2	11179.5	11127.1
7.5°	12938.5	12910.7	12571.9	12162.2	11687.7	11194.9	10702.0	10307.6	10002.7	9882.5	9928.7
10°	12926.1	12839.9	12343.9	11687.7	10997.7	10261.4	9552.9	8998.4	8490.1	8228.2	8234.4
12.5°	12858.4	12716.7	12005.1	11154.8	10141.3	9155.5	8071.1	7322.6	6734.2	6386.1	6278.2
15°	12799.8	12553.4	11607.7	10430.9	9170.9	7763.1	6441.5	5517.3	5024.4	4750.3	4747.2
17.5°	12738.2	12396.3	11173.3	9663.8	8055.7	6244.4	4858.1	4152.6	3921.6	3949.3	3903.1
20°	12673.5	12211.4	10720.4	8810.5	6697.2	4657.8	3638.2	3351.7	3416.4	3542.7	3561.2
22.5°	12599.6	12014.3	10233.7	7870.9	5267.8	3505.7	2951.2	2908.1	3074.4	3271.6	3299.3
25°	12485.6	11767.8	9620.7	6888.2	4063.3	2824.9	2584.6	2615.4	2778.7	2945.0	2963.5
27.5°	12325.4	11462.9	9001.5	5662.1	3052.9	2424.4	2362.8	2402.9	2483.0	2584.6	2609.3
30°	12109.8	11117.8	8289.9	4602.4	2446.0	2224.2	2199.5	2221.1	2267.3	2310.4	2322.8
32.5°	11894.1	10785.1	7572.1	3524.2	2181.1	2091.7	2067.1	2067.1	2067.1	2073.2	2076.3
35°	11693.9	10470.9	6801.9	2744.8	2042.4	1987.0	1953.1	1916.1	1910.0	1888.4	1888.4
37.5°	11583.0	10184.4	5982.5	2298.1	1940.8	1900.7	1854.5	1792.9	1759.0	1762.1	1755.9
40°	11604.6	9996.5	5237.0	2045.5	1857.6	1814.5	1743.6	1672.8	1651.2	1651.2	1645.0
42.5°	11847.9	9934.9	4522.3	1913.0	1777.5	1728.2	1638.9	1574.2	1561.9	1558.8	1564.9
45°	12408.6	10085.8	3881.5	1826.8	1709.7	1635.8	1546.5	1487.9	1475.6	1475.6	1472.5
47.5°	13502.2	10575.7	3422.5	1771.3	1660.4	1564.9	1472.5	1414.0	1392.4	1386.3	1386.3
50°	15202.7	11638.5	3080.6	1722.0	1598.8	1500.2	1404.7	1337.0	1303.1	1300.0	1296.9
52.5°	17565.5	13295.8	2948.1	1685.1	1531.1	1432.5	1327.7	1263.0	1219.9	1210.7	1204.5
55°	20328.8	15609.3	3129.9	1657.4	1460.2	1355.5	1247.6	1179.9	1139.8	1121.3	1118.3
57.5°	23529.5	18388.0	3819.9	1620.4	1395.5	1272.3	1167.5	1099.8	1056.6	1035.1	1028.9
60°	26403.7	21243.7	5024.4	1598.8	1340.1	1182.9	1075.1	1013.5	973.5	951.9	948.8
62.5°	29561.3	23967.0	6463.1	1657.4	1315.4	1096.7	988.9	933.4	899.5	878.0	878.0
65°	32934.6	26693.3	7415.0	1854.5	1352.4	1028.9	896.5	850.2	819.4	804.0	801.0
67.5°	35208.0	27636.0	6108.8	2057.8	1444.8	955.0	807.1	770.1	751.7	736.3	736.3
69°	34961.6	26443.8	4506.9	2110.2	1472.5	918.0	757.8	730.1	705.5	699.3	693.1
70°	34182.2	25085.2	3776.8	2076.3	1451.0	884.1	727.0	693.1	671.6	665.4	662.3
72.5°	30445.4	21755.1	2812.6	1805.2	1235.3	767.1	643.8	613.0	594.6	585.3	585.3
75°	25294.7	17781.2	2196.5	1435.6	967.3	646.9	551.4	526.8	511.4	505.2	502.1
77.5°	14176.9	9928.7	1577.3	1124.4	733.2	523.7	462.1	440.5	425.1	419.0	419.0
80°	3949.3	2837.2	927.3	742.4	499.1	397.4	366.6	351.2	329.6	314.2	323.5
82.5°	1487.9	1229.2	529.9	446.7	317.3	264.9	255.7	243.4	234.1	212.6	212.6
85°	723.9	597.6	338.9	237.2	175.6	138.6	132.5	126.3	120.1	104.7	107.8
87.5°	249.5	264.9	147.9	86.3	52.4	33.9	27.7	15.4	15.4	15.4	15.4
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)