

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: P459538

Luminaire Tested: **GALN-SA9D-735-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459538
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA9D-735-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(9) 70 CRI, 3500K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
SPILL LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53738 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

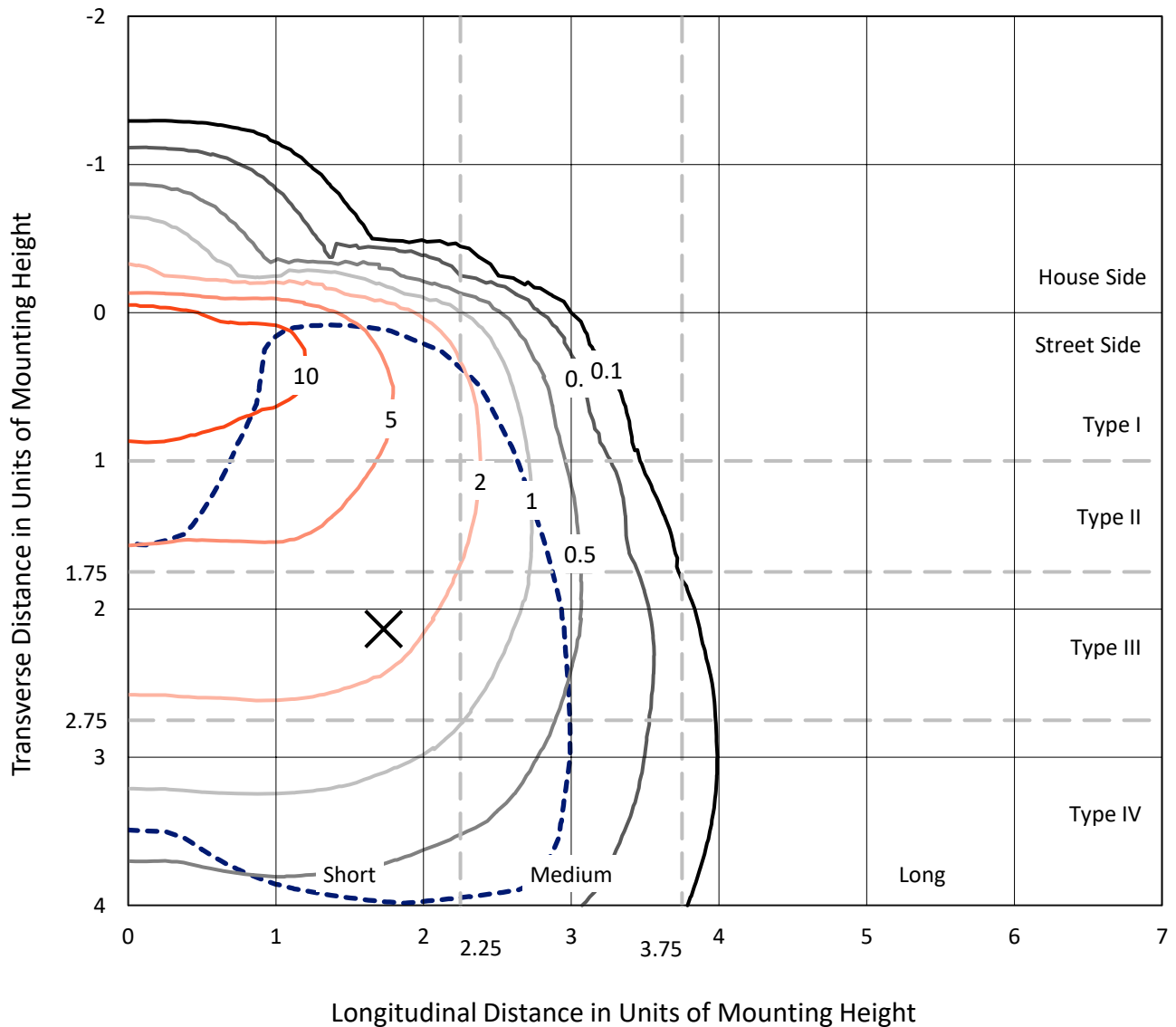
Input Watts (W): 552
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

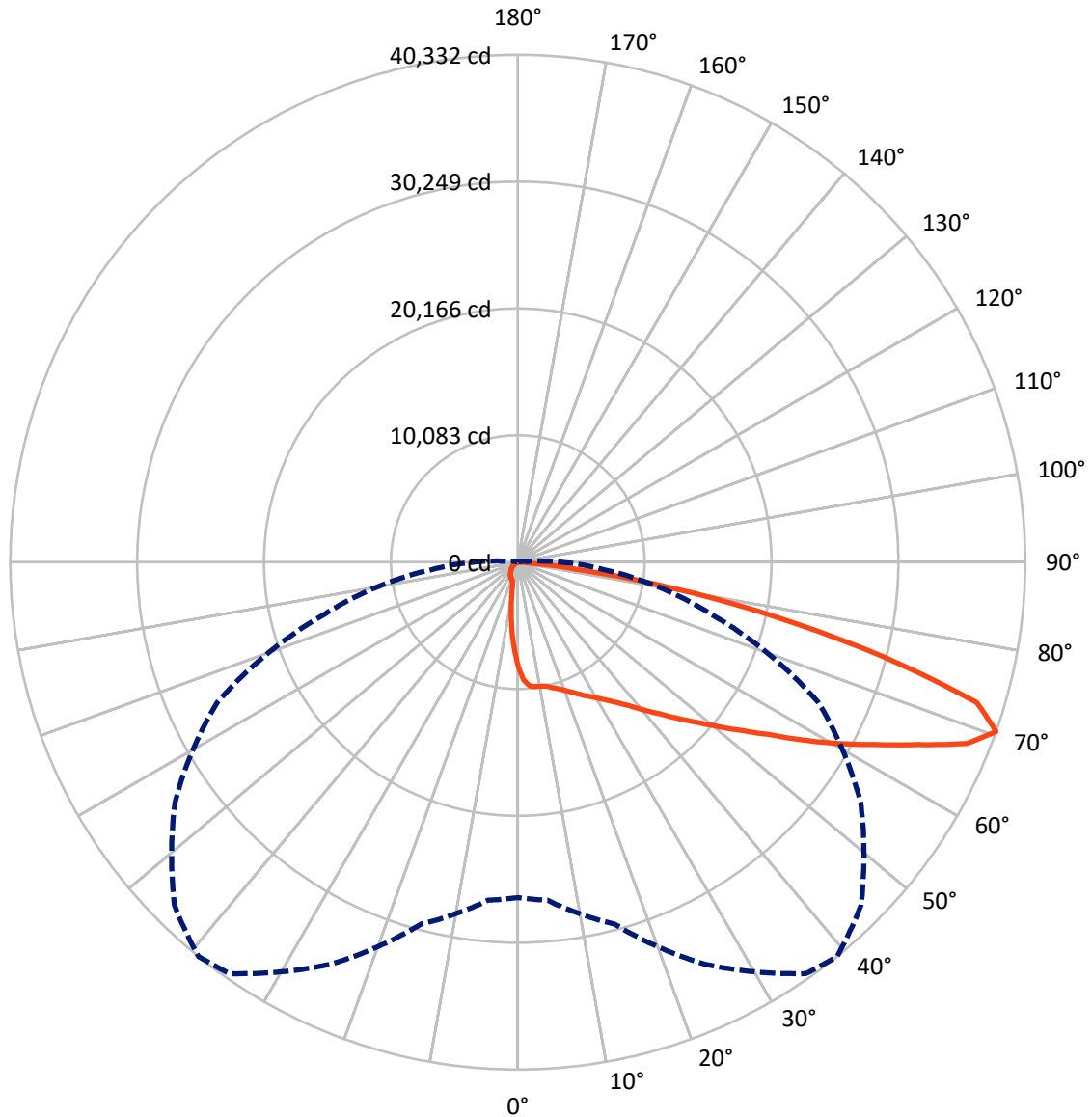
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3504.0	0.0	3504.0
	% Fixture	6.5	0.0	6.5
Street Side	Lumens	50234.0	0.0	50234.0
	% Fixture	93.5	0.0	93.5
Total	Lumens	53738.0	0.0	53738.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	715.2	1.3
10°-20°	1858.5	3.5
20°-30°	3113.6	5.8
30°-40°	4828.8	9.0
40°-50°	7652.2	14.2
50°-60°	11216.9	20.9
60°-70°	14377.4	26.8
70°-80°	9034.3	16.8
80°-90°	941.2	1.8
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°	53738.0	100.0
0°-180°	53738.0	100.0

Coefficient of Utilization



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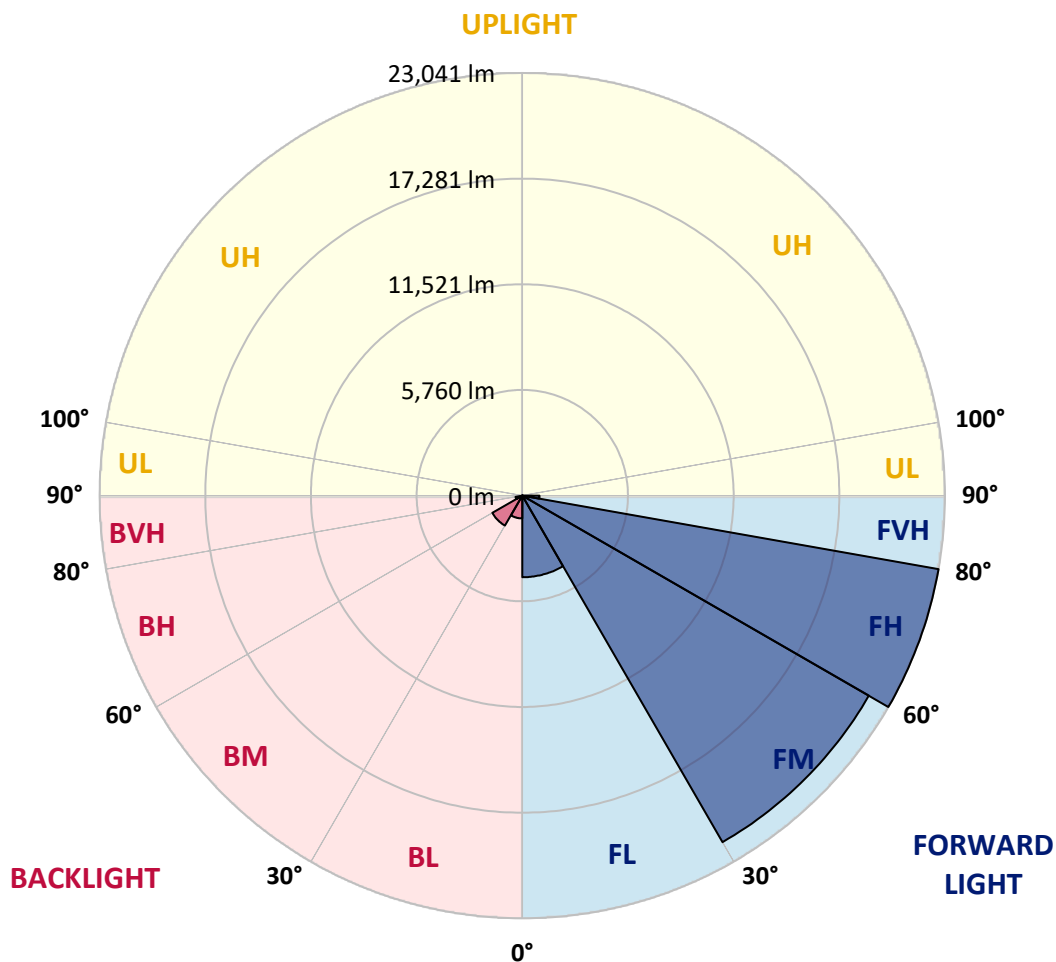
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4446.6	8.3			
FM	(30°-60°)	21812.1	40.6			
FH	(60°-80°)	23041.1	42.9			G5
FVH	(80°-90°)	934.2	1.7			G5
BL	(0°-30°)	1240.7	2.3	B3/2500		
BM	(30°-60°)	1885.7	3.5	B2/2500		
BH	(60°-80°)	370.6	0.7	B1/500		G1/500
BVH	(80°-90°)	6.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0
2.5°	9688.6	9656.1	9612.7	9562.2	9417.7	9392.5	9305.8	9121.6	8901.4	8720.8	8471.6
5°	10147.2	10165.2	10132.7	10042.5	9937.7	9876.4	9768.0	9482.7	9197.5	8832.7	8424.7
7.5°	10251.9	10288.0	10248.3	10161.6	10060.5	9995.5	9908.9	9663.3	9331.1	8915.8	8356.1
10°	10241.1	10284.4	10259.1	10179.7	10096.6	10035.2	9941.4	9746.4	9479.1	9042.2	8377.7
12.5°	10223.0	10280.8	10277.2	10237.5	10168.9	10121.9	10064.1	9890.8	9641.6	9226.4	8496.9
15°	10172.5	10244.7	10309.7	10342.2	10345.8	10345.8	10273.6	10089.4	9851.1	9468.3	8652.2
17.5°	10194.1	10277.2	10439.7	10533.6	10598.6	10591.4	10515.5	10316.9	10053.3	9717.5	8814.7
20°	10327.7	10439.7	10667.2	10855.0	10920.0	10898.3	10797.2	10566.1	10266.4	9930.5	8973.6
22.5°	10656.4	10757.5	11042.7	11263.0	11310.0	11252.2	11107.7	10793.6	10522.7	10161.6	9165.0
25°	11147.5	11266.6	11530.2	11696.3	11696.3	11663.8	11461.6	11093.3	10811.6	10483.0	9414.1
27.5°	11743.3	11844.4	12104.4	12252.5	12165.8	12071.9	11869.7	11425.5	11154.7	10887.5	9713.9
30°	12346.3	12411.3	12685.8	12750.8	12660.5	12541.3	12324.7	11880.5	11642.2	11436.3	10147.2
32.5°	12916.9	13057.7	13285.2	13270.8	13148.0	13090.2	12891.6	12418.6	12285.0	12263.3	10753.9
35°	13487.5	13595.8	13798.0	13848.6	13740.2	13729.4	13585.0	13234.7	13238.3	13379.1	11700.0
37.5°	13978.6	14076.1	14314.4	14426.3	14448.0	14502.2	14444.4	14213.3	14541.9	14928.3	12953.0
40°	14390.2	14527.5	14830.8	15025.8	15249.7	15448.3	15459.1	15509.7	16170.5	16834.9	14588.8
42.5°	14711.6	14903.0	15343.6	15704.7	16217.4	16470.2	16672.4	16950.5	18062.7	19055.8	16517.2
45°	15130.5	15350.8	15899.7	16466.6	17268.3	17683.6	17965.2	18709.1	20287.2	21641.3	18496.0
47.5°	15823.8	15939.4	16499.1	17326.1	18380.5	18972.7	19521.6	20648.3	22674.1	23887.4	20142.7
50°	16715.8	16791.6	17214.1	18362.4	19727.4	20507.4	21507.7	22833.0	25151.3	25750.7	21074.4
52.5°	17701.6	17726.9	18044.7	19503.5	21236.9	22219.1	23338.5	24974.4	27169.9	27079.6	21691.9
55°	18846.3	18810.2	19081.0	20742.2	23024.4	24147.4	25451.0	27166.3	28921.3	28022.1	22045.8
57.5°	20157.2	20059.7	20323.3	22385.2	25313.8	26657.1	27982.4	29058.5	30279.1	28813.0	22215.5
60°	21529.4	21334.4	21648.5	24230.5	28011.3	29286.0	30387.4	30676.3	31709.1	29441.3	21923.0
62.5°	22623.5	22627.1	23212.1	26194.9	30784.6	31900.4	32485.4	32745.4	32940.4	29304.1	20384.7
65°	24331.6	24389.4	25324.6	28921.3	33994.9	34962.7	35363.5	34518.5	32994.6	27599.6	18073.5
67.5°	26093.8	26278.0	27989.6	32676.8	37703.5	38483.5	37967.1	34861.5	31521.3	23710.5	13704.1
70°	26668.0	26971.3	29791.6	35262.4	39927.9	40332.4	38584.6	33261.8	26350.2	15852.7	6897.2
72.5°	24436.3	24927.4	28755.2	34319.9	38508.8	38158.5	34522.1	27895.7	16751.9	6019.7	2105.3
75°	17232.2	17448.8	23898.3	28469.9	30972.4	29979.3	26259.9	17983.3	6890.0	1690.0	722.2
77.5°	8897.7	8793.0	14213.3	18889.7	22089.1	21059.9	17196.1	9309.4	2610.8	704.2	447.8
80°	4600.5	4676.4	6149.7	9898.0	13483.8	12407.7	9168.6	4315.3	1390.3	390.0	343.1
82.5°	2578.3	2419.4	3535.3	4322.5	6305.0	4943.6	3517.2	3055.0	606.7	234.7	325.0
85°	469.4	491.1	1939.2	2336.4	2188.3	1390.3	1133.9	2040.3	176.9	130.0	227.5
87.5°	7.2	7.2	375.6	671.7	426.1	195.0	357.5	292.5	36.1	50.6	39.7
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°	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0	8385.0
2.5°	8345.2	8208.0	7951.6	7698.9	7377.5	7113.9	6936.9	6752.8	6565.0	6579.4	6622.8
5°	8200.8	7962.5	7456.9	6922.5	6409.7	5947.5	5492.5	5084.4	4918.3	4766.7	4773.9
7.5°	8056.4	7720.5	6980.3	6142.5	5366.1	4578.9	4008.3	3538.9	3289.7	3101.9	3047.8
10°	7991.4	7547.2	6543.3	5391.4	4290.0	3430.5	2697.5	2314.7	2018.6	1924.7	1950.0
12.5°	8020.3	7460.5	6149.7	4712.5	3401.7	2390.5	1877.8	1682.8	1617.8	1606.9	1599.7
15°	8074.4	7399.1	5763.3	3961.4	2498.9	1776.7	1578.1	1541.9	1534.7	1527.5	1531.1
17.5°	8146.6	7345.0	5351.6	3257.2	1917.5	1552.8	1495.0	1476.9	1473.3	1473.3	1473.3
20°	8218.9	7283.6	4893.0	2628.9	1599.7	1466.1	1430.0	1419.2	1415.6	1415.6	1411.9
22.5°	8301.9	7229.4	4427.2	2065.5	1473.3	1404.7	1372.2	1365.0	1361.4	1357.8	1357.8
25°	8421.1	7160.8	3932.5	1690.0	1393.9	1346.9	1314.4	1307.2	1303.6	1289.2	1292.8
27.5°	8580.0	7110.3	3423.3	1458.9	1321.7	1274.7	1253.1	1242.2	1235.0	1224.2	1227.8
30°	8796.6	7066.9	2881.7	1332.5	1238.6	1198.9	1177.2	1170.0	1162.8	1151.9	1151.9
32.5°	9172.2	7085.0	2311.1	1231.4	1162.8	1115.8	1094.2	1086.9	1079.7	1068.9	1068.9
35°	9735.5	7189.7	1848.9	1144.7	1072.5	1025.6	1003.9	1003.9	993.1	978.6	975.0
37.5°	10656.4	7456.9	1484.2	1061.7	985.8	942.5	917.2	910.0	899.2	877.5	873.9
40°	11743.3	7872.2	1249.4	978.6	906.4	863.1	841.4	819.7	790.8	769.2	765.6
42.5°	13108.3	8298.3	1083.3	895.6	830.6	790.8	765.6	729.4	686.1	657.2	653.6
45°	14531.1	8688.3	971.4	819.7	758.3	725.8	696.9	639.2	585.0	548.9	545.3
47.5°	15592.7	8760.5	881.1	747.5	696.9	664.4	624.7	552.5	480.3	447.8	436.9
50°	16094.7	8410.2	787.2	675.3	635.6	599.4	548.9	465.8	386.4	346.7	339.4
52.5°	16271.6	7803.6	711.4	610.3	574.2	530.8	469.4	375.6	303.3	263.6	260.0
55°	16199.4	7038.0	642.8	548.9	501.9	451.4	390.0	299.7	223.9	191.4	184.2
57.5°	15820.2	6063.0	574.2	487.5	429.7	379.2	310.6	223.9	151.7	122.8	119.2
60°	14798.3	4734.2	505.6	418.9	364.7	310.6	245.6	158.9	93.9	68.6	68.6
62.5°	13072.2	3513.6	440.6	350.3	306.9	249.2	173.3	101.1	50.6	36.1	32.5
65°	10923.6	2592.8	368.3	296.1	256.4	195.0	122.8	61.4	25.3	10.8	7.2
67.5°	7623.0	1599.7	306.9	241.9	209.4	140.8	75.8	25.3	10.8	0.0	0.0
70°	3463.0	761.9	234.7	184.2	158.9	101.1	39.7	14.4	7.2	0.0	0.0
72.5°	1076.1	400.8	166.1	133.6	108.3	65.0	21.7	10.8	7.2	0.0	0.0
75°	498.3	256.4	104.7	72.2	61.4	32.5	14.4	7.2	3.6	0.0	0.0
77.5°	371.9	198.6	61.4	39.7	32.5	21.7	10.8	7.2	3.6	0.0	0.0
80°	325.0	101.1	36.1	25.3	18.1	14.4	7.2	3.6	0.0	0.0	0.0
82.5°	292.5	50.6	21.7	14.4	10.8	7.2	3.6	3.6	0.0	0.0	0.0
85°	158.9	28.9	14.4	10.8	7.2	3.6	3.6	0.0	0.0	0.0	0.0
87.5°	28.9	14.4	10.8	7.2	7.2	3.6	3.6	3.6	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)