

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: P454659

Luminaire Tested: **GALN-SA5D-740-U-AFL-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P454659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-25)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA5D-740-U-AFL-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31741 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

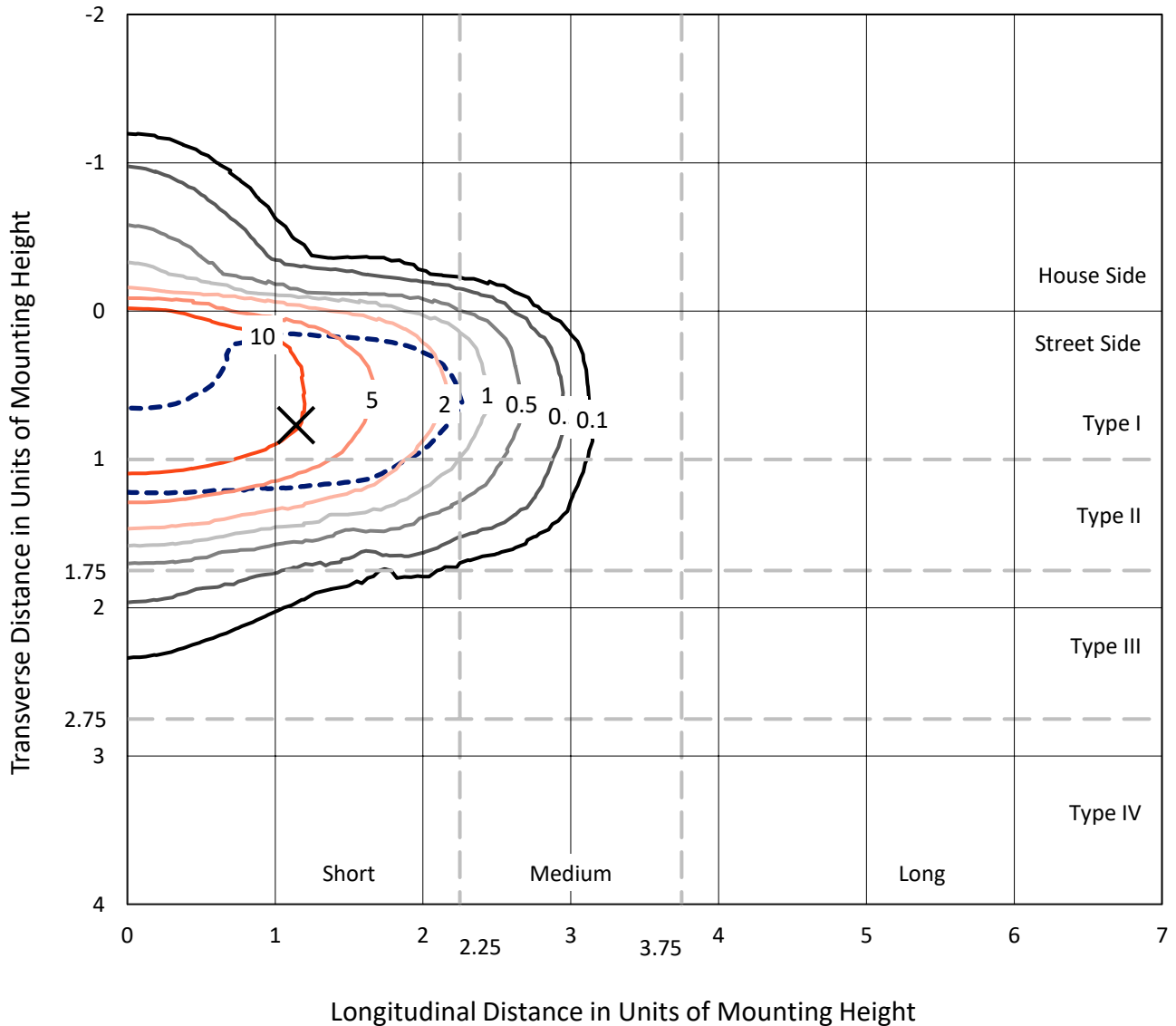
Input Watts (W): 309
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

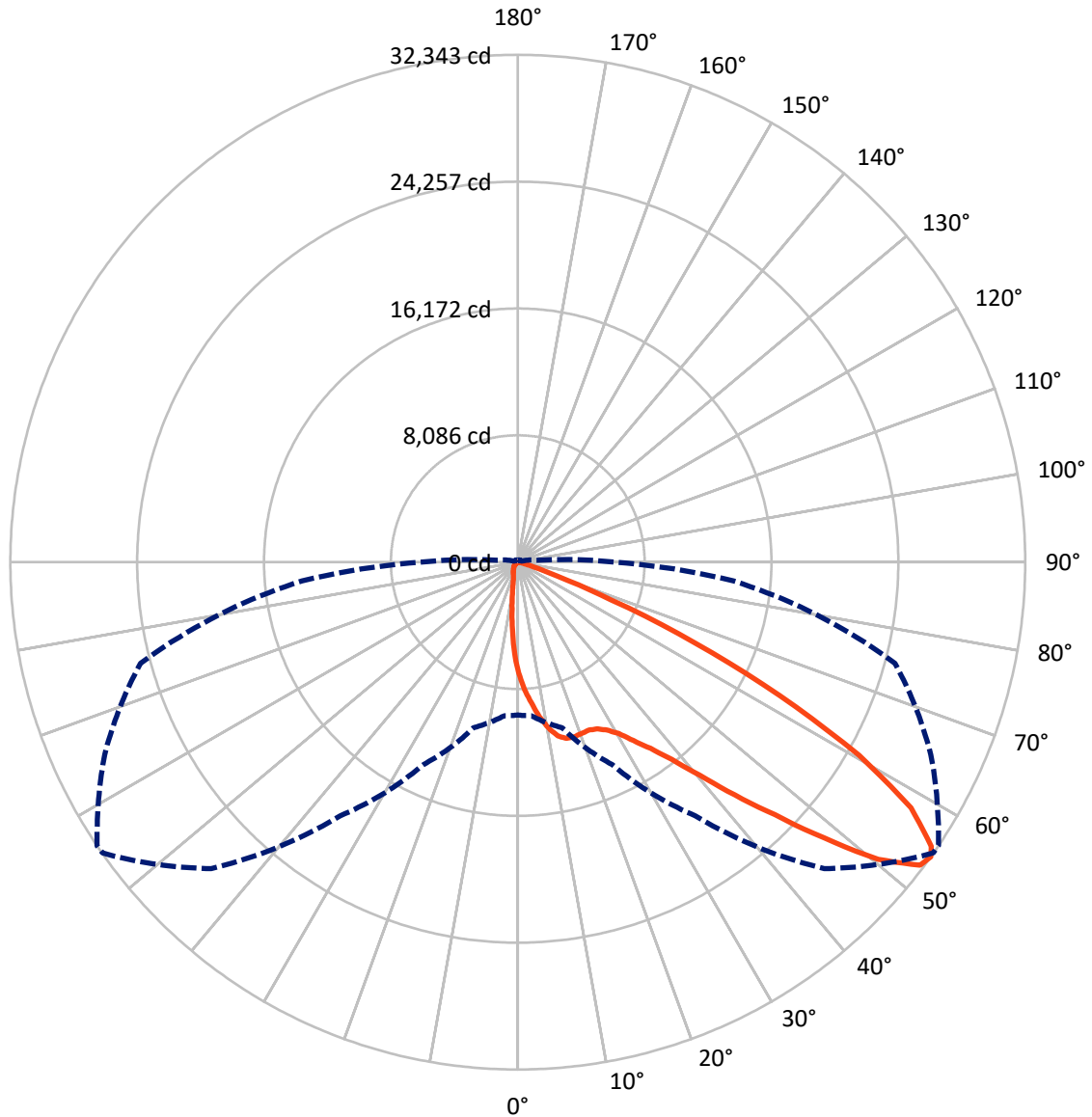
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16.9 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 56-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1500.9	0.0	1500.9
	% Fixture	4.7	0.0	4.7
Street Side	Lumens	30240.0	0.0	30240.0
	% Fixture	95.3	0.0	95.3
Total	Lumens	31741.0	0.0	31741.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	623.1	2.0
10°-20°	1684.6	5.3
20°-30°	2917.6	9.2
30°-40°	5036.2	15.9
40°-50°	8571.7	27.0
50°-60°	8482.8	26.7
60°-70°	3871.7	12.2
70°-80°	497.2	1.6
80°-90°	56.0	0.2
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°	31741.0	100.0
0°-180°	31741.0	100.0



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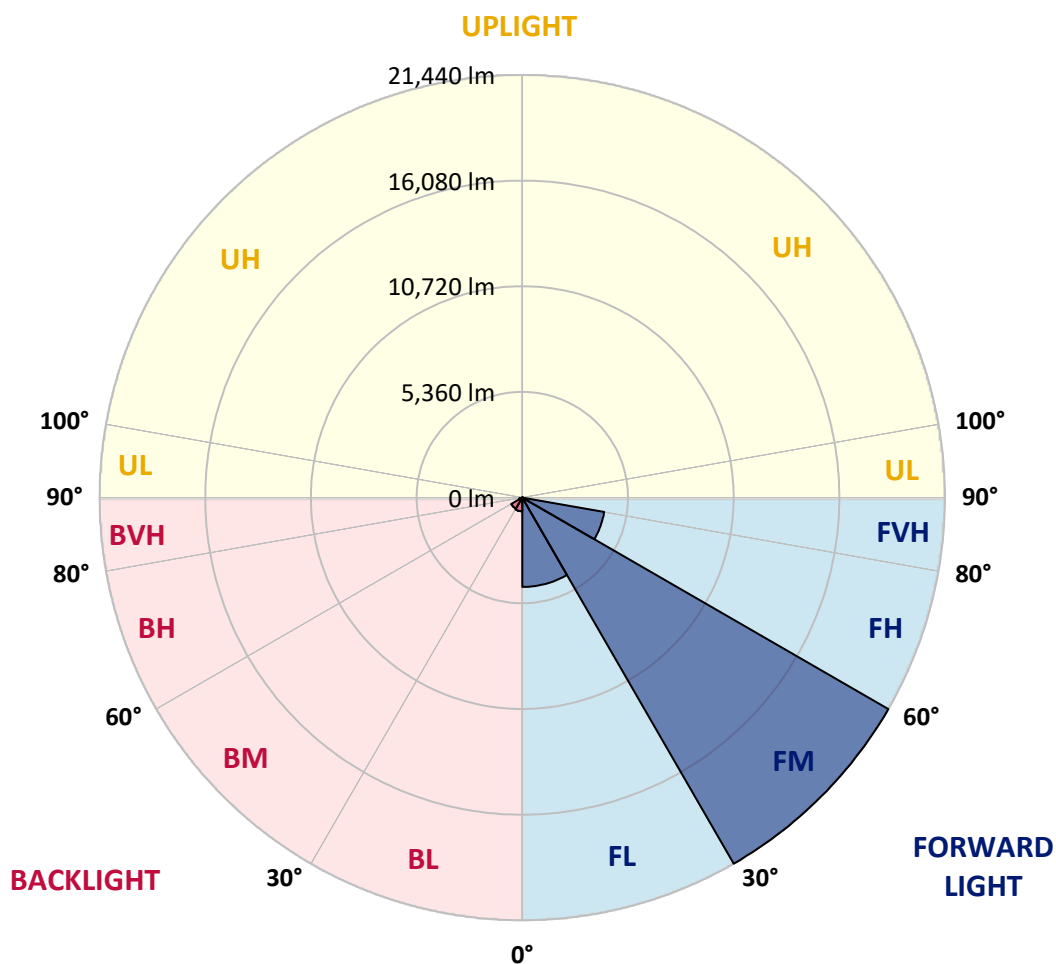
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4531.1	14.3			
FM (30°-60°)	21440.2	67.5			
FH (60°-80°)	4218.7	13.3			G2/5000
FVH (80°-90°)	50.0	0.2			G1/100
BL (0°-30°)	694.2	2.2	B2/1000		
BM (30°-60°)	650.5	2.0	B1/1000		
BH (60°-80°)	150.3	0.5	B1/500		G1/500
BVH (80°-90°)	6.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	65°	75°	85°
0°	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9
2.5°	8962.1	8900.0	8814.4	8748.0	8591.7	8366.8	8129.1	8129.1	7900.0	7580.9	7255.4
5°	10337.0	10296.3	10212.8	10041.5	9865.9	9551.1	9073.5	8990.0	8581.0	8002.8	7394.6
7.5°	10895.9	10915.2	10919.5	10874.5	10791.0	10480.5	10007.2	9949.4	9296.2	8521.0	7576.6
10°	10360.5	10454.8	10546.9	10733.2	10996.6	11071.5	10803.8	10743.9	10101.4	9045.7	7773.6
12.5°	9563.9	9615.3	9666.7	9960.1	10489.0	11095.1	11375.6	11373.5	10829.5	9568.2	8024.2
15°	9193.4	9238.4	9242.7	9373.3	9831.6	10713.9	11619.7	11651.9	11540.5	10212.8	8294.0
17.5°	9270.5	9306.9	9276.9	9309.1	9548.9	10294.2	11591.9	11699.0	12116.6	10831.7	8538.1
20°	9773.8	9844.4	9728.8	9638.9	9711.7	10182.8	11497.7	11647.6	12523.5	11435.6	8760.8
22.5°	10677.5	10716.0	10570.4	10324.1	10195.7	10416.2	11472.0	11619.7	12870.4	11930.3	8889.3
25°	11681.8	11669.0	11508.4	11232.1	10962.3	10887.4	11641.2	11773.9	13157.3	12375.7	8927.9
27.5°	12686.2	12724.8	12454.9	12112.3	11788.9	11594.0	12020.2	12118.7	13480.7	12883.2	8975.0
30°	13853.3	13791.2	13525.7	13133.8	12763.3	12491.3	12630.5	12658.4	13926.1	13555.7	9099.2
32.5°	15371.6	15200.3	14902.7	14217.4	13951.8	13491.4	13525.7	13559.9	14467.9	14221.7	9249.1
35°	17431.8	17423.2	16840.7	15917.7	15271.0	14699.2	14549.3	14577.1	15288.1	15211.0	9581.0
37.5°	19911.6	19945.9	19282.0	18352.6	17161.9	16253.9	15945.6	15949.8	16534.5	16577.3	10086.4
40°	21931.0	22021.0	21624.8	20997.3	19821.7	18401.9	17883.6	17836.5	18286.2	18232.7	10808.1
42.5°	22800.5	22884.0	23031.8	23250.2	22603.5	21432.1	20209.3	20273.5	20410.6	20035.8	11617.6
45°	22374.3	22507.1	23087.4	24436.6	25044.8	24650.7	23192.4	22967.5	22387.2	21995.3	12431.4
47.5°	20599.0	20922.4	21892.5	24138.9	26267.6	27599.6	26558.8	26261.1	24365.9	23425.8	12949.6
50°	17680.2	17699.4	19050.7	21922.5	25633.7	29460.5	29995.9	29773.2	26209.7	24228.9	13210.9
52.5°	12816.8	13238.7	14476.5	17802.2	22888.3	29177.8	32186.6	32094.6	28111.4	24640.0	13587.8
54°	9743.8	9825.2	10925.9	14225.9	19733.9	27625.3	32321.6	32343.0	29055.8	24888.4	13810.5
55°	7987.8	7792.9	8949.3	12118.7	17581.7	26252.6	31880.4	31983.2	29479.8	25016.9	13975.4
57.5°	3786.2	3788.3	4672.7	6392.4	11011.6	20384.9	29184.3	29548.3	29526.9	25237.5	14482.9
60°	1916.6	1929.5	2124.4	2951.0	5439.4	13551.4	24130.3	24997.7	27254.8	25269.6	14650.0
62.5°	1340.6	1325.6	1293.5	1419.8	2289.3	6887.0	17965.0	18718.8	23156.0	24046.8	14118.9
65°	1147.8	1115.7	1025.8	1006.5	1156.4	2743.3	11189.3	12418.5	17680.2	20821.7	12607.0
67.5°	980.8	968.0	886.6	837.3	818.1	1195.0	5773.5	6420.2	12084.4	14966.9	9548.9
70°	833.0	826.6	777.4	715.3	661.7	715.3	2141.5	2653.3	6735.0	8058.4	4505.7
72.5°	676.7	683.1	691.7	612.5	556.8	507.5	914.4	1064.3	2818.2	2880.3	1576.1
75°	593.2	586.8	586.8	533.2	464.7	376.9	503.3	541.8	863.0	800.9	366.2
77.5°	417.6	402.6	471.1	439.0	387.6	267.7	287.0	304.1	357.6	306.2	171.3
80°	289.1	289.1	302.0	394.0	349.1	194.9	175.6	188.5	212.0	182.0	98.5
82.5°	162.8	167.0	197.0	209.9	203.4	130.6	115.6	117.8	141.3	124.2	62.1
85°	19.3	32.1	113.5	111.4	83.5	57.8	64.2	66.4	87.8	77.1	36.4
87.5°	2.1	4.3	23.6	30.0	21.4	23.6	23.6	23.6	30.0	34.3	25.7
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°	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9	7051.9
2.5°	7079.8	6917.0	6529.4	6079.7	5792.7	5325.9	4931.9	4647.0	4576.4	4439.3	4480.0
5°	7071.2	6732.9	5942.6	5107.5	4216.6	3552.7	3058.1	2668.3	2497.0	2383.5	2304.2
7.5°	7075.5	6546.5	5278.8	3948.9	2884.6	2233.6	1775.3	1537.6	1379.1	1312.7	1321.3
10°	7088.3	6336.7	4507.8	2925.3	1946.6	1443.4	1162.8	1049.3	995.8	987.2	985.1
12.5°	7118.3	6107.5	3771.2	2171.5	1362.0	1049.3	942.3	903.7	886.6	886.6	880.2
15°	7150.4	5854.8	3158.7	1614.7	1049.3	901.6	852.3	833.0	822.3	822.3	820.2
17.5°	7150.4	5563.6	2586.9	1252.8	903.7	828.8	790.2	764.5	755.9	755.9	753.8
20°	7105.5	5225.2	2079.4	1008.6	820.2	760.2	721.7	693.8	683.1	678.9	676.7
22.5°	6949.1	4773.4	1655.4	867.3	751.7	700.3	651.0	618.9	610.3	606.0	608.2
25°	6670.8	4263.7	1310.6	762.4	689.6	627.5	584.6	561.1	552.5	552.5	554.6
27.5°	6383.8	3730.5	1038.6	683.1	614.6	558.9	524.7	509.7	507.5	514.0	516.1
30°	6118.2	3195.1	841.6	618.9	548.2	501.1	477.6	473.3	473.3	475.4	477.6
32.5°	5822.7	2726.1	704.6	563.2	494.7	454.0	441.1	441.1	445.4	445.4	449.7
35°	5636.4	2323.5	618.9	509.7	454.0	419.7	411.2	413.3	419.7	428.3	432.6
37.5°	5535.8	2002.3	563.2	466.8	415.4	391.9	383.3	387.6	402.6	417.6	419.7
40°	5544.3	1760.3	518.2	430.4	385.5	359.8	353.3	366.2	381.2	396.2	398.3
42.5°	5638.6	1580.4	475.4	387.6	359.8	323.4	321.2	334.1	340.5	355.5	357.6
45°	5749.9	1449.8	430.4	342.6	312.7	280.5	282.7	293.4	302.0	325.5	329.8
47.5°	5784.2	1359.8	379.0	291.2	257.0	246.3	248.4	254.8	272.0	293.4	295.5
50°	5822.7	1304.2	329.8	246.3	218.4	216.3	218.4	222.7	233.4	242.0	239.8
52.5°	5987.6	1302.0	289.1	214.1	186.3	190.6	192.7	190.6	182.0	169.2	164.9
54°	6141.8	1308.5	269.8	199.2	171.3	177.7	175.6	164.9	143.5	130.6	124.2
55°	6266.0	1314.9	259.1	188.5	162.8	164.9	167.0	145.6	117.8	104.9	100.7
57.5°	6510.1	1299.9	233.4	164.9	143.5	134.9	132.8	96.4	64.2	55.7	51.4
60°	6388.1	1173.5	212.0	141.3	122.1	109.2	89.9	53.5	32.1	23.6	23.6
62.5°	5908.4	995.8	188.5	115.6	100.7	83.5	47.1	30.0	15.0	8.6	6.4
65°	5285.2	837.3	169.2	92.1	79.2	53.5	25.7	19.3	6.4	0.0	0.0
67.5°	3929.6	621.0	143.5	72.8	60.0	34.3	17.1	10.7	2.1	0.0	0.0
70°	1820.3	379.0	122.1	55.7	42.8	25.7	12.8	6.4	0.0	0.0	0.0
72.5°	522.5	237.7	100.7	40.7	30.0	21.4	10.7	4.3	2.1	0.0	0.0
75°	182.0	190.6	75.0	30.0	23.6	15.0	8.6	4.3	2.1	0.0	0.0
77.5°	109.2	154.2	47.1	25.7	19.3	12.8	8.6	4.3	2.1	2.1	0.0
80°	62.1	102.8	30.0	21.4	17.1	10.7	6.4	4.3	2.1	2.1	0.0
82.5°	34.3	49.3	23.6	19.3	15.0	10.7	6.4	4.3	2.1	2.1	2.1
85°	27.8	25.7	19.3	17.1	12.8	8.6	6.4	2.1	0.0	0.0	0.0
87.5°	21.4	17.1	17.1	17.1	12.8	8.6	6.4	2.1	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)