

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: P453399

Luminaire Tested: **GALN-SA4B-830-U-T2R-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453399
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-7)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-830-U-T2R-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14321 lumens
Efficiency: N/A
Efficacy: 87.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

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

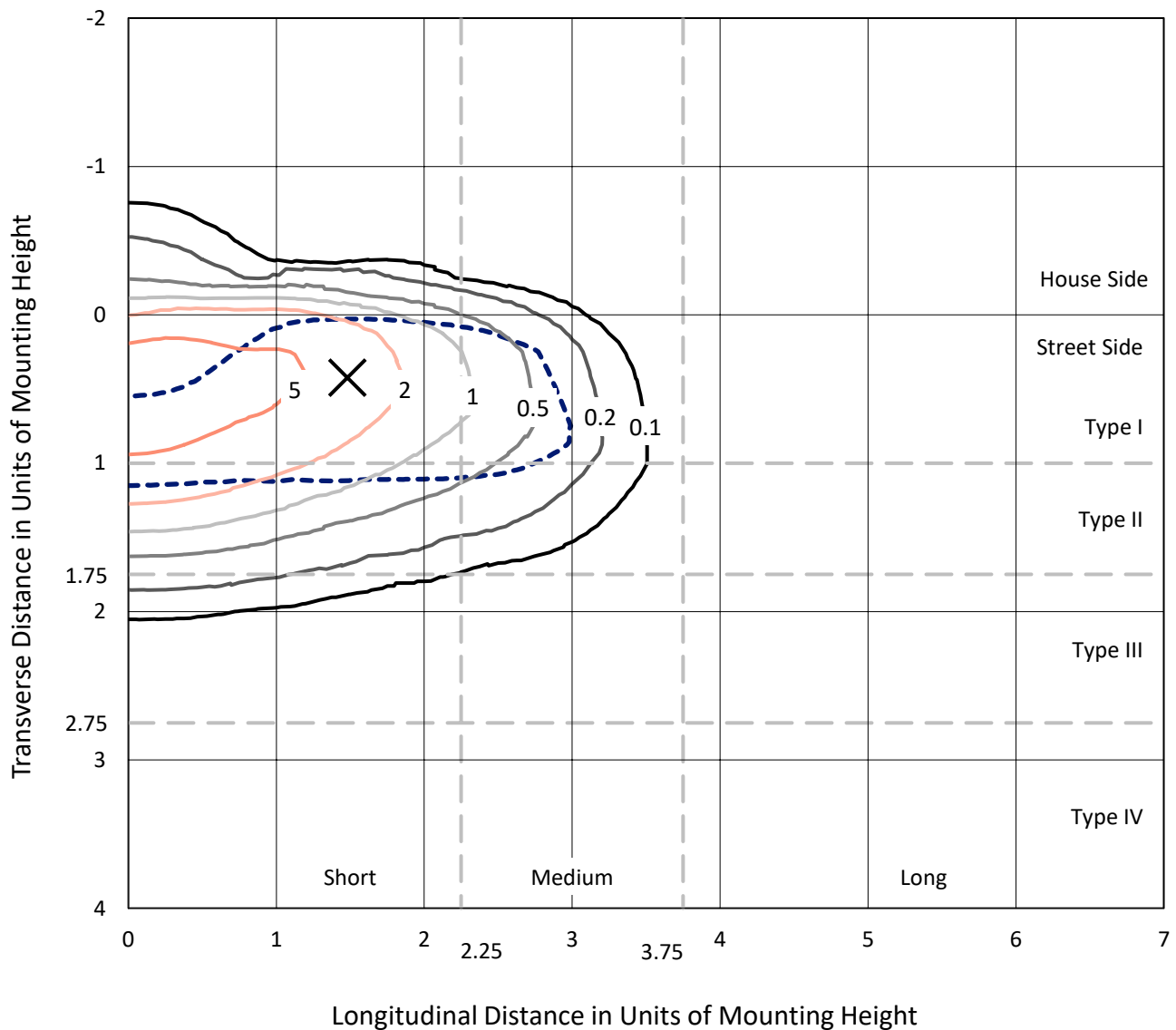


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

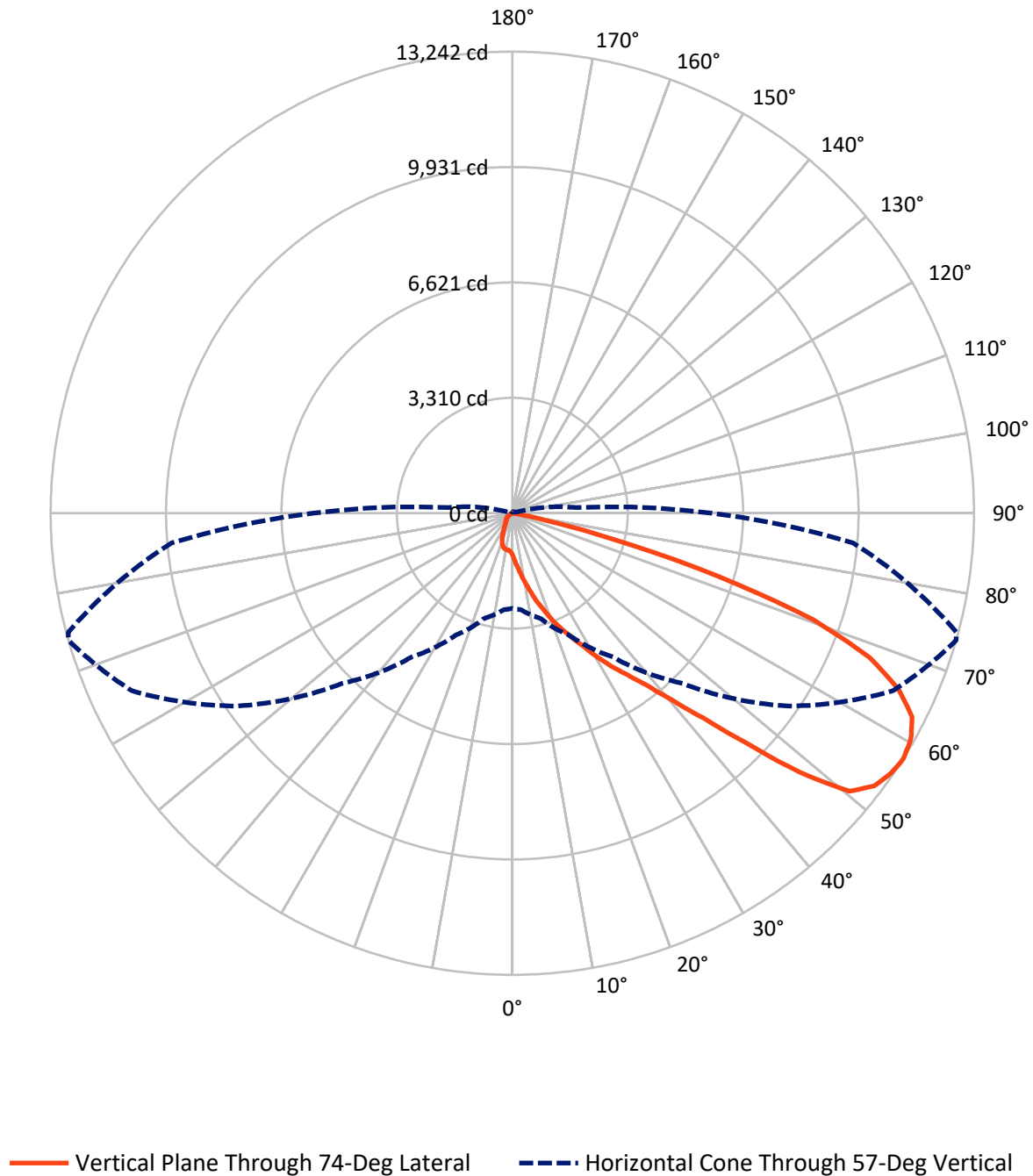


Based on 25 foot mounting height. Maximum calculated value = 7.3 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	826.0	0.0	826.0
	% Fixture	5.8	0.0	5.8
Street Side	Lumens	13495.0	0.0	13495.0
	% Fixture	94.2	0.0	94.2
Total	Lumens	14321.0	0.0	14321.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.8	1.0
10°-20°	570.6	4.0
20°-30°	1221.0	8.5
30°-40°	2244.1	15.7
40°-50°	3440.3	24.0
50°-60°	3639.3	25.4
60°-70°	2376.6	16.6
70°-80°	649.4	4.5
80°-90°	35.0	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°	14321.0	100.0
0°-180°	14321.0	100.0

Coefficient of Utilization



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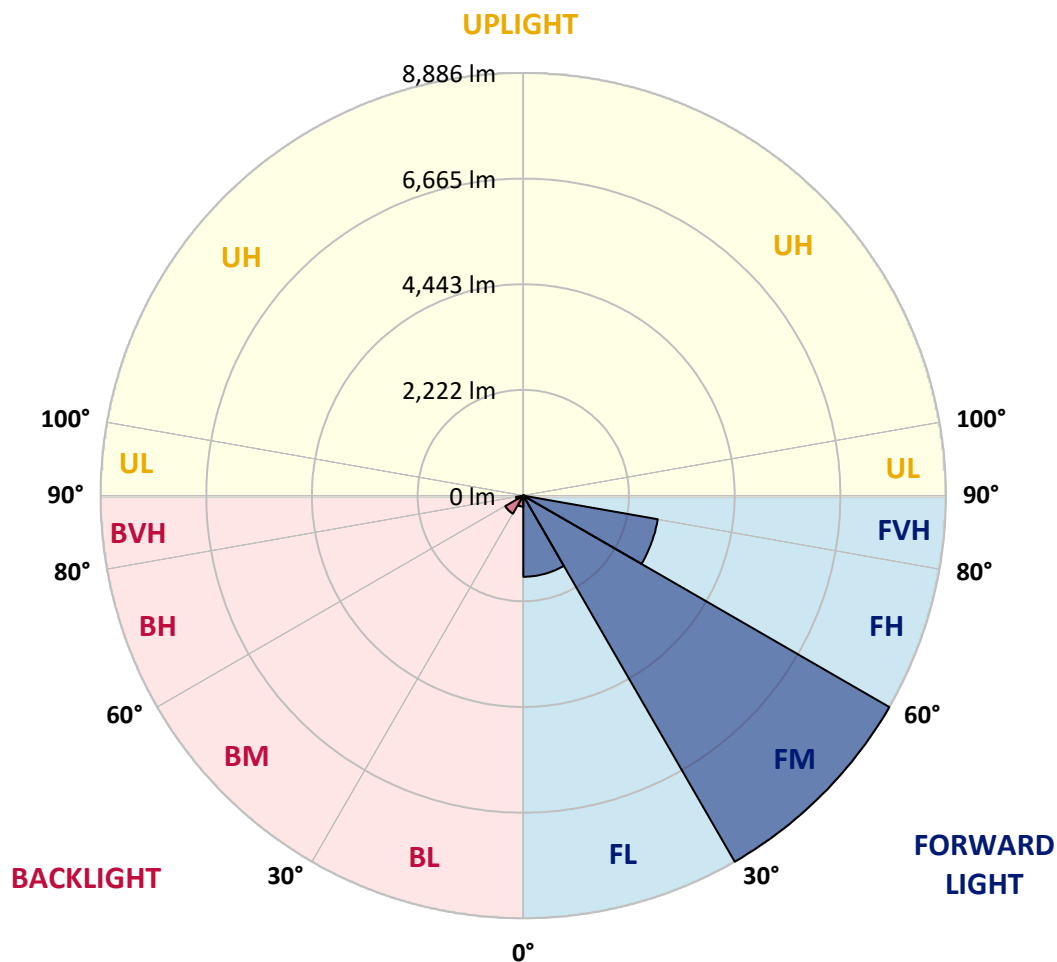
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1705.6	11.9			
FM	(30°-60°)	8886.4	62.1			
FH	(60°-80°)	2870.9	20.0			G2/5000
FVH	(80°-90°)	32.1	0.2			G1/100
BL	(0°-30°)	230.7	1.6	B1/500		
BM	(30°-60°)	437.3	3.1	B1/1000		
BH	(60°-80°)	155.1	1.1	B1/500		G1/500
BVH	(80°-90°)	2.9	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4
2.5°	1755.0	1739.2	1707.6	1696.7	1650.2	1578.1	1514.8	1429.7	1362.5	1355.6	1274.5
5°	2350.3	2314.7	2299.9	2228.7	2116.9	2012.1	1832.2	1695.7	1538.5	1526.6	1363.5
7.5°	2923.8	2874.3	2859.5	2792.3	2661.7	2496.6	2263.3	2015.1	1765.9	1743.2	1483.1
10°	3339.0	3346.0	3319.3	3274.8	3169.0	3000.9	2713.2	2374.0	2019.0	1990.4	1617.6
12.5°	3636.7	3635.7	3640.6	3639.6	3583.3	3455.7	3153.2	2762.6	2297.9	2241.5	1771.9
15°	3830.5	3833.4	3848.3	3899.7	3905.6	3826.5	3574.4	3134.4	2621.2	2551.0	1939.0
17.5°	4026.2	4047.0	4070.7	4119.2	4162.7	4131.0	3953.1	3522.0	2913.9	2861.5	2117.9
20°	4349.6	4378.2	4364.4	4394.0	4416.8	4419.8	4282.3	3879.9	3268.8	3180.8	2322.6
22.5°	4866.7	4865.7	4830.1	4776.7	4732.2	4730.2	4605.6	4247.7	3591.2	3506.1	2528.3
25°	5520.2	5523.2	5454.0	5301.7	5191.0	5055.5	4912.2	4570.0	3936.3	3831.4	2744.8
27.5°	6269.7	6250.9	6146.1	5936.5	5717.0	5485.6	5279.0	4944.8	4302.1	4215.1	2993.0
30°	6943.1	6936.1	6813.5	6557.5	6268.7	6036.4	5736.8	5414.4	4775.7	4668.9	3270.8
32.5°	7569.9	7579.8	7409.8	7144.8	6865.9	6598.0	6281.6	5863.3	5240.4	5089.1	3573.4
35°	8059.4	8069.3	7893.3	7672.8	7386.0	7163.6	6862.0	6341.9	5699.2	5571.7	3921.4
37.5°	8320.4	8333.3	8231.4	8065.3	7886.3	7774.6	7493.8	6957.9	6256.9	6179.7	4332.7
40°	8369.8	8384.7	8340.2	8295.7	8285.8	8365.9	8283.8	7683.6	7030.1	6909.5	4945.8
42.5°	8221.5	8241.3	8261.1	8360.0	8561.7	8855.3	9141.1	8668.5	8025.8	7863.6	5695.3
45°	7832.0	7830.0	7908.1	8164.2	8616.0	9242.9	10036.9	9901.4	9382.3	9189.5	6754.2
47.5°	7165.5	7155.7	7324.7	7689.6	8393.6	9314.1	10767.6	11398.4	11113.7	10935.7	7892.3
50°	6150.1	6198.5	6464.5	6973.7	7840.9	9098.6	10993.0	12380.3	12534.5	12345.6	8811.8
52.5°	4960.6	4958.6	5375.9	6067.0	7022.2	8624.0	10835.8	12558.2	12996.3	12851.9	9264.7
55°	3671.3	3697.0	4131.0	4828.1	5959.3	7757.8	10322.6	12375.3	13172.3	13070.4	9563.3
57°	2731.0	2776.4	3124.5	3862.1	5033.8	6900.6	9639.4	12048.0	13241.5	13186.1	9811.5
57.5°	2549.0	2551.0	2890.1	3560.5	4762.9	6571.3	9443.6	11911.6	13239.5	13208.8	9852.0
60°	1569.2	1618.6	1852.9	2406.6	3486.4	5128.7	8131.6	11127.5	13136.7	13181.2	10025.0
62.5°	939.3	960.1	1112.4	1450.5	2247.5	3743.4	6654.4	10123.9	12868.7	13004.2	10013.2
65°	604.1	609.1	678.3	878.0	1405.0	2530.2	5127.7	8798.0	12175.6	12424.8	9621.6
67.5°	466.7	474.6	502.3	576.4	814.7	1576.1	3626.8	7383.1	11054.3	11375.7	8672.4
70°	414.3	418.2	428.1	451.9	538.9	889.9	2256.3	5767.4	9166.8	9257.8	6786.8
72.5°	338.2	349.0	379.7	387.6	427.1	555.7	1255.7	3871.0	6159.0	6181.7	3796.8
75°	262.0	264.0	309.5	332.2	359.9	382.6	560.6	1951.8	2958.4	2800.2	1463.4
77.5°	195.8	204.7	225.4	254.1	293.7	273.9	251.1	735.6	918.6	901.7	425.2
80°	125.6	130.5	157.2	190.8	228.4	179.0	141.4	215.5	201.7	207.6	101.8
82.5°	63.3	64.3	100.9	155.2	145.3	90.0	89.0	88.0	75.1	74.2	47.5
85°	6.9	14.8	65.3	89.0	65.3	29.7	41.5	40.5	39.6	40.5	27.7
87.5°	1.0	1.0	10.9	12.9	8.9	9.9	11.9	12.9	15.8	14.8	11.9
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°	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4	1199.4
2.5°	1235.0	1195.4	1122.2	1052.0	999.6	966.0	922.5	906.7	884.0	881.0	870.1
5°	1288.4	1213.2	1085.7	984.8	903.7	842.4	789.0	744.5	708.9	701.0	705.0
7.5°	1364.5	1252.8	1074.8	937.3	824.6	719.8	634.8	582.4	544.8	531.0	532.9
10°	1450.5	1305.2	1072.8	886.9	714.9	586.3	493.4	446.9	425.2	417.3	408.4
12.5°	1552.4	1365.5	1067.9	808.8	594.2	467.7	401.4	373.8	353.0	347.1	347.1
15°	1667.0	1429.7	1044.1	711.9	482.5	386.6	342.1	320.4	313.4	307.5	307.5
17.5°	1786.7	1493.0	994.7	592.3	400.4	331.2	303.5	290.7	280.8	273.9	273.9
20°	1923.1	1555.3	915.6	486.5	338.2	295.6	273.9	259.1	251.1	245.2	243.2
22.5°	2052.7	1605.7	814.7	399.5	294.7	266.0	246.2	230.4	222.5	219.5	219.5
25°	2187.1	1636.4	693.1	330.2	268.9	241.3	219.5	206.7	199.7	197.8	196.8
27.5°	2317.7	1654.2	586.3	288.7	245.2	218.5	197.8	187.9	180.9	179.0	180.0
30°	2475.9	1657.2	482.5	259.1	224.4	196.8	178.0	169.1	165.1	163.1	162.2
32.5°	2636.0	1653.2	405.4	241.3	204.7	178.0	162.2	155.2	152.3	149.3	149.3
35°	2816.0	1632.4	345.1	223.5	185.9	162.2	148.3	142.4	138.4	135.5	134.5
37.5°	3039.4	1621.6	310.5	203.7	169.1	147.3	134.5	128.5	125.6	121.6	120.6
40°	3391.4	1670.0	299.6	185.9	152.3	133.5	121.6	114.7	110.7	106.8	105.8
42.5°	3830.5	1755.0	281.8	168.1	137.4	120.6	108.8	100.9	93.9	89.0	87.0
45°	4399.0	1866.8	254.1	149.3	124.6	106.8	95.9	86.0	77.1	73.2	72.2
47.5°	4995.2	1974.6	229.4	134.5	110.7	94.9	83.1	72.2	64.3	61.3	60.3
50°	5361.1	1996.3	213.6	117.7	96.9	82.1	70.2	60.3	55.4	52.4	52.4
52.5°	5528.2	1961.7	191.8	102.8	84.0	72.2	60.3	52.4	49.4	47.5	46.5
55°	5644.8	1908.3	163.1	89.0	72.2	61.3	53.4	47.5	43.5	41.5	40.5
57°	5713.1	1836.1	141.4	78.1	62.3	53.4	47.5	42.5	38.6	34.6	34.6
57.5°	5716.0	1808.4	135.5	77.1	59.3	51.4	46.5	41.5	36.6	32.6	31.6
60°	5628.0	1618.6	108.8	65.3	47.5	43.5	38.6	32.6	25.7	21.8	20.8
62.5°	5345.2	1377.3	90.0	55.4	38.6	33.6	27.7	24.7	17.8	12.9	12.9
65°	4917.1	1117.3	77.1	44.5	31.6	24.7	18.8	17.8	10.9	5.9	4.9
67.5°	4298.1	870.1	65.3	36.6	26.7	17.8	12.9	11.9	5.9	2.0	0.0
70°	3274.8	593.3	54.4	29.7	19.8	12.9	8.9	6.9	4.0	1.0	0.0
72.5°	1887.5	326.3	45.5	22.7	14.8	9.9	6.9	4.0	4.0	0.0	0.0
75°	674.3	140.4	34.6	16.8	11.9	7.9	4.9	2.0	3.0	1.0	0.0
77.5°	214.6	75.1	22.7	12.9	9.9	5.9	4.0	2.0	2.0	1.0	0.0
80°	63.3	39.6	13.8	10.9	6.9	4.9	3.0	1.0	2.0	1.0	0.0
82.5°	34.6	19.8	10.9	7.9	6.9	4.0	3.0	1.0	1.0	1.0	0.0
85°	17.8	11.9	8.9	7.9	6.9	4.0	3.0	1.0	0.0	1.0	1.0
87.5°	9.9	8.9	8.9	7.9	6.9	4.9	3.0	1.0	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)