

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: P299995

Luminaire Tested: **GLNA-AF-08-LED-E1-SL3-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P299995
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P194479)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GLNA-AF-08-LED-E1-SL3-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 4000K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Type III
w/Spill Control WITH HOUSESIDE SHEILD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37020.6 lumens
Efficiency: N/A
Efficacy: 83.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B3 - U0 - G5

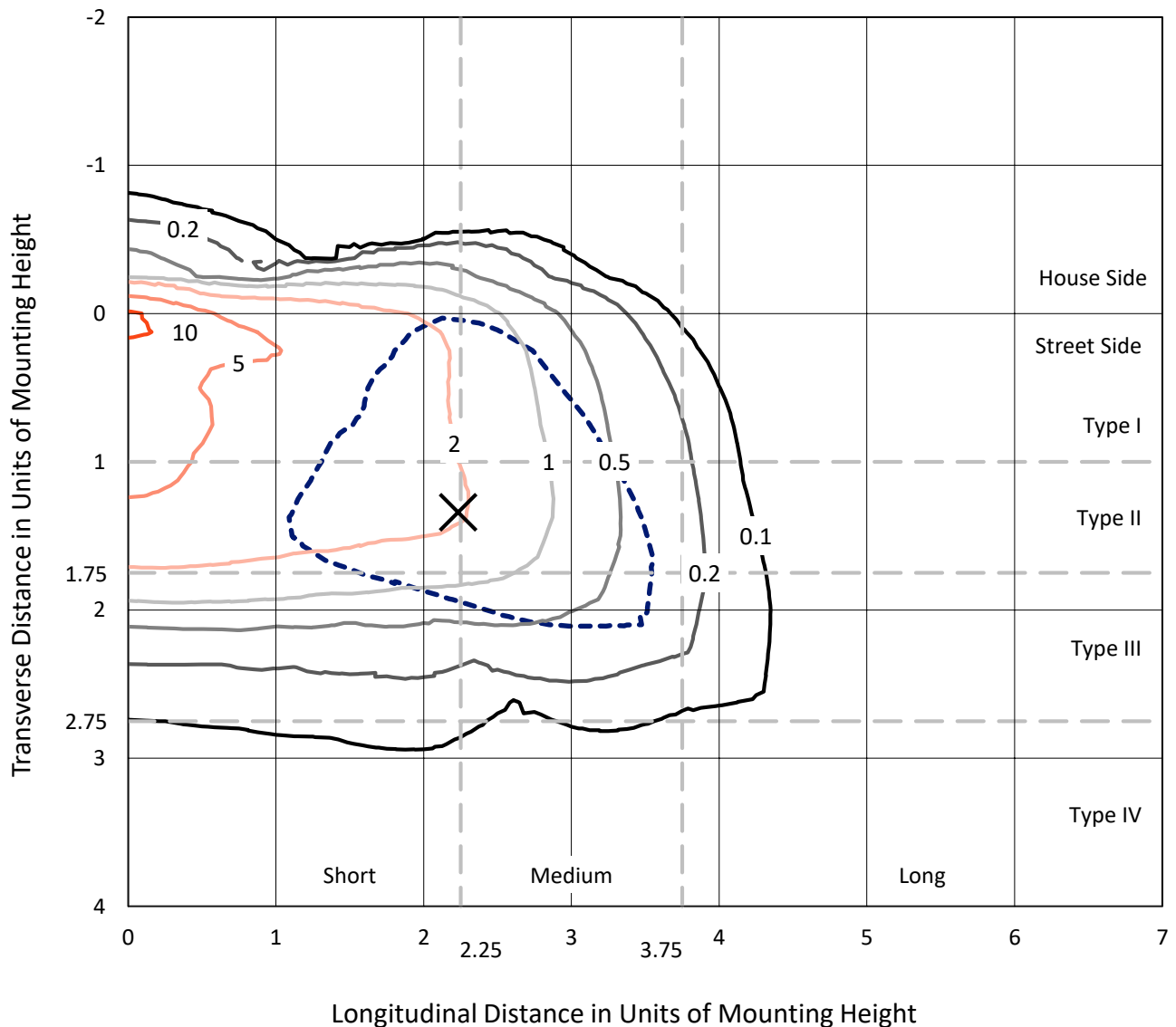
Input Watts (W): 445
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

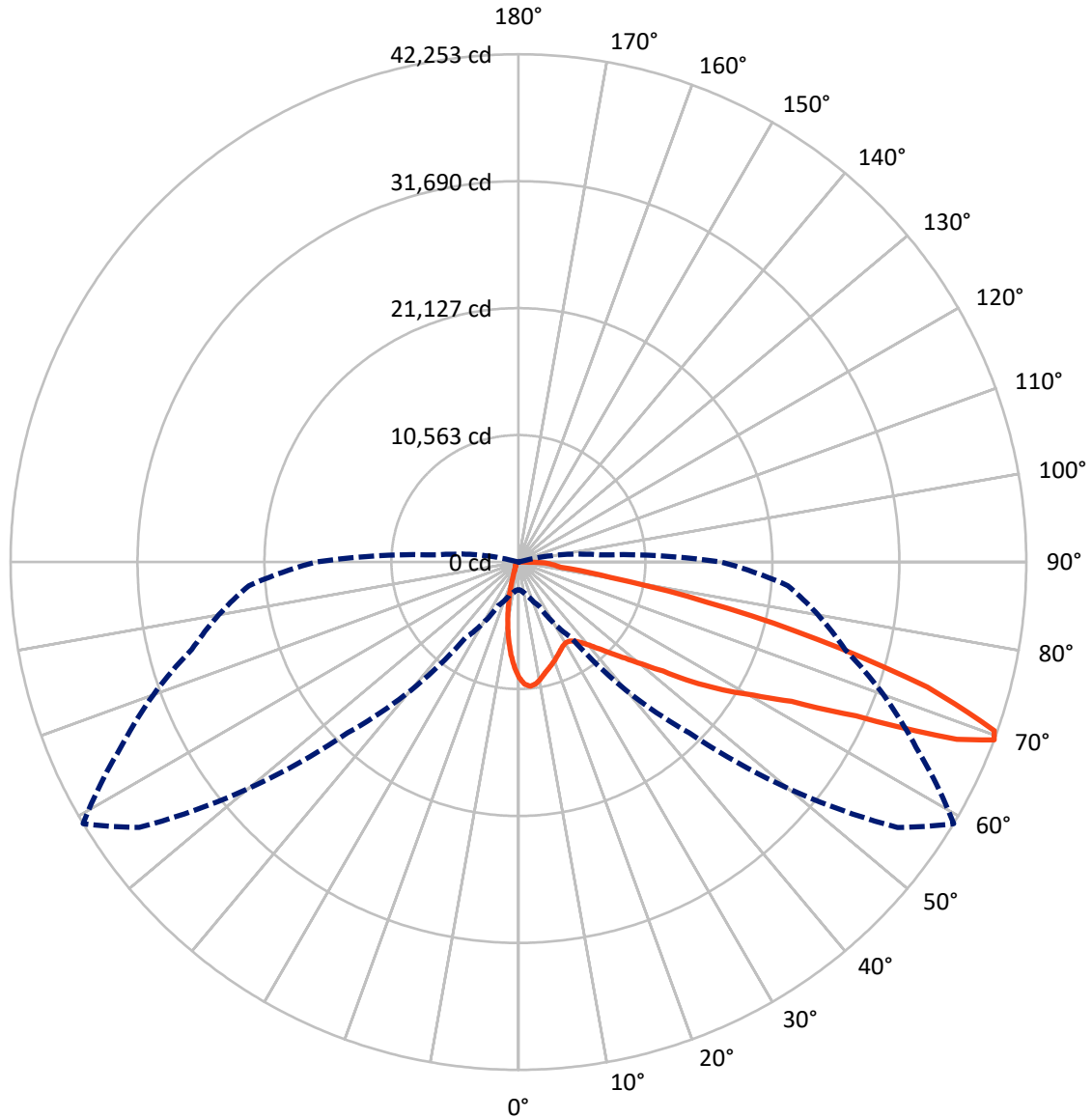
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.8 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3014.8	0.0	3014.8
	% Fixture	8.1	0.0	8.1
Street Side	Lumens	34005.8	0.0	34005.8
	% Fixture	91.9	0.0	91.9
Total	Lumens	37020.6	0.0	37020.6
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	782.2	2.1
10°-20°	1616.1	4.4
20°-30°	2174.7	5.9
30°-40°	3157.6	8.5
40°-50°	5257.6	14.2
50°-60°	8201.8	22.2
60°-70°	10149.1	27.4
70°-80°	5143.4	13.9
80°-90°	538.2	1.5
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°	37020.6	100.0
0°-180°	37020.6	100.0



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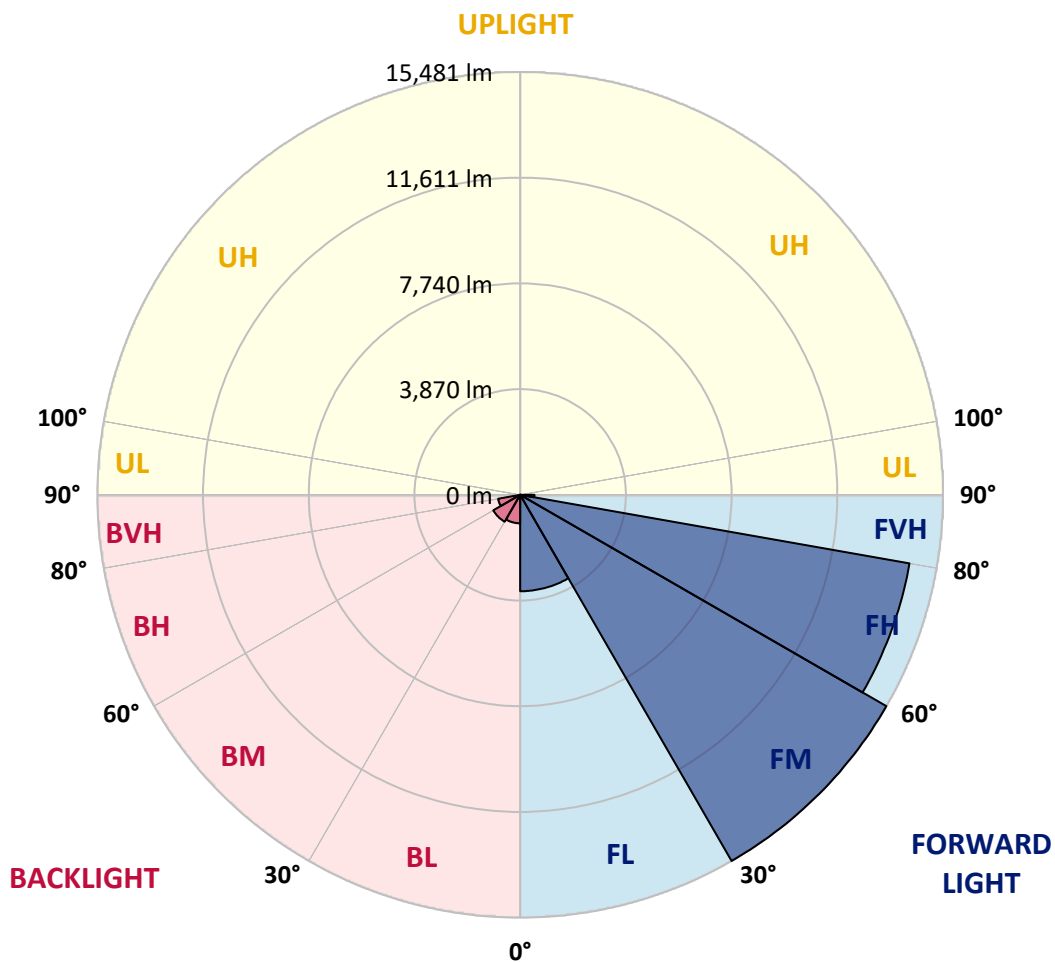
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3529.5	9.5			
FM	(30°-60°)	15481.0	41.8			
FH	(60°-80°)	14473.7	39.1			G5
FVH	(80°-90°)	521.6	1.4			G4/750
BL	(0°-30°)	1043.5	2.8	B3/2500		
BM	(30°-60°)	1136.0	3.1	B2/2500		
BH	(60°-80°)	818.8	2.2	B2/1000		G2/1000
BVH	(80°-90°)	16.6	0.0			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8
2.5°	10561.1	10557.3	10511.0	10490.1	10452.1	10372.9	10249.3	10184.6	10080.1	9897.5	9652.9
5°	10464.8	10515.5	10542.1	10544.6	10571.9	10542.1	10431.2	10377.3	10232.8	9939.4	9500.1
7.5°	9812.0	9830.3	9908.3	9974.8	10104.8	10228.4	10268.3	10244.8	10159.3	9845.5	9261.2
10°	9112.9	9131.2	9223.8	9311.3	9487.4	9677.6	9878.5	9921.0	9956.5	9711.2	9031.1
12.5°	8509.5	8528.5	8622.9	8737.7	8943.0	9177.5	9489.4	9558.4	9715.6	9583.8	8846.7
15°	7990.4	7998.6	8091.2	8233.1	8478.4	8779.5	9133.8	9244.7	9485.5	9493.8	8685.7
17.5°	7548.6	7569.6	7626.6	7762.2	8030.3	8403.0	8815.6	8974.7	9256.7	9418.4	8528.5
20°	7278.6	7299.5	7297.6	7373.1	7613.9	8011.3	8497.4	8687.6	9031.1	9341.0	8388.4
22.5°	7226.7	7226.7	7172.2	7161.4	7304.0	7636.7	8166.6	8398.6	8827.7	9307.4	8290.2
25°	7413.0	7404.1	7268.5	7157.6	7163.9	7362.3	7845.9	8122.2	8656.5	9330.3	8237.6
27.5°	7806.6	7795.8	7624.1	7413.0	7243.1	7241.2	7603.1	7900.4	8520.3	9439.3	8258.5
30°	8350.4	8346.6	8160.3	7894.1	7586.7	7304.0	7519.5	7789.5	8432.2	9635.8	8306.7
32.5°	8944.9	8938.6	8798.5	8518.4	8128.6	7586.7	7607.6	7833.8	8457.5	9897.5	8423.9
35°	9575.5	9564.8	9503.9	9259.3	8830.2	8107.7	7896.6	8072.2	8616.6	10289.2	8654.0
37.5°	10257.5	10268.3	10312.0	10077.5	9627.5	8838.4	8380.2	8499.3	8936.7	10821.0	9028.6
40°	11264.6	11262.7	11277.3	10969.3	10536.4	9732.1	9055.8	9093.9	9472.9	11526.4	9598.4
42.5°	13091.9	12964.5	12577.3	11949.2	11513.7	10753.8	9908.3	9868.4	10128.2	12399.2	10395.7
45°	15547.9	15275.4	14270.8	13067.2	12510.1	11905.4	10956.6	10829.2	10994.6	13448.1	11380.0
47.5°	17659.7	17377.1	15956.1	14230.9	13567.3	12998.1	12185.6	11955.5	12010.0	14622.5	12627.3
50°	18377.9	18239.7	16998.7	15244.3	14590.9	14373.5	13611.6	13330.9	13253.5	15980.8	14073.7
52.5°	18128.8	18118.6	17291.5	15901.6	15528.9	15797.0	15405.3	15080.8	14796.2	17413.2	15545.4
55°	17728.8	17781.4	17410.7	16477.1	16464.4	17096.9	17858.8	17588.8	16764.2	18968.6	16814.3
57.5°	16626.0	16849.7	17344.1	17565.9	18080.6	18727.7	19902.2	20061.2	19085.8	20159.5	17867.0
60°	13489.9	13981.8	15598.0	17722.5	20163.9	21775.7	22368.3	22503.9	20990.4	21149.5	19288.6
62.5°	9575.5	10077.5	12127.3	15721.6	20195.0	25780.1	26041.8	25508.2	23088.3	22617.4	21740.2
65°	5082.5	5470.4	7144.9	11348.3	17509.5	26709.9	32466.7	30875.9	26789.1	25503.7	24907.3
67.5°	2599.9	2717.1	3383.3	5554.0	12037.3	23724.6	38225.5	39345.4	33167.7	28367.9	24754.6
69°	2300.7	2369.8	2811.6	4015.2	7707.7	20094.8	38506.3	42253.3	36507.3	28129.0	22495.7
70°	2227.2	2288.0	2689.9	3634.2	6025.0	16851.6	37432.0	41997.9	37361.0	27220.7	20808.5
72.5°	1890.6	1942.6	2395.2	3211.5	4896.8	8365.0	30406.9	35588.2	33525.8	22675.7	15061.8
75°	1264.4	1436.2	2298.8	3010.6	4555.2	4752.3	20046.7	25717.3	23890.1	15294.4	7845.9
77.5°	303.6	326.4	649.0	2395.2	4166.0	4182.5	10310.1	15987.1	13039.9	5451.4	1854.5
80°	163.5	157.2	181.9	475.4	3878.9	3925.2	4641.4	7760.3	4655.9	904.4	611.0
82.5°	115.4	109.0	117.3	199.0	1220.7	3575.3	3357.9	3512.6	1929.9	347.3	274.4
85°	41.8	39.9	64.6	180.0	382.8	2055.4	3449.8	2897.1	1563.6	159.1	200.9
87.5°	14.6	12.7	25.4	98.2	117.3	875.3	2129.0	2189.8	615.4	96.3	94.4
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°	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8	9635.8
2.5°	9550.2	9420.3	9182.0	8936.7	8710.4	8438.5	8302.2	8168.5	8112.1	8091.2	7992.9
5°	9273.9	9053.9	8547.5	8038.6	7569.6	7071.4	6743.1	6479.4	6324.1	6248.7	6129.5
7.5°	8920.2	8560.2	7791.4	7006.7	6276.0	5555.9	5022.3	4611.6	4328.9	4193.3	4069.7
10°	8576.7	8097.5	7004.8	5935.0	4942.4	3987.9	3250.8	2717.1	2376.1	2219.0	2118.8
12.5°	8269.3	7647.5	6244.9	4890.5	3644.4	2527.0	1777.2	1352.5	1140.9	1067.3	1031.8
15°	7994.8	7233.0	5526.8	3897.9	2468.0	1444.4	971.6	827.1	793.5	793.5	789.1
17.5°	7735.0	6826.7	4833.4	2966.2	1549.0	883.5	739.0	720.0	720.0	728.2	728.2
20°	7485.9	6439.5	4163.5	2129.0	975.4	701.0	668.0	663.6	668.0	678.2	678.2
22.5°	7272.3	6087.7	3537.9	1460.9	724.4	631.9	615.4	609.1	611.0	617.3	621.8
25°	7113.2	5790.5	2947.8	990.0	623.7	575.5	557.1	546.3	538.1	538.1	541.9
27.5°	7013.1	5539.5	2376.1	720.0	560.9	523.5	493.7	477.3	458.2	448.1	451.9
30°	6939.5	5300.5	1839.9	588.2	502.6	464.6	427.2	399.9	372.7	360.0	364.4
32.5°	6912.3	5107.8	1375.4	519.1	450.0	408.2	361.9	326.4	297.3	286.5	289.0
35°	6985.8	4955.1	1007.1	469.0	408.2	355.6	303.6	263.7	240.8	234.5	236.4
37.5°	7178.5	4873.3	753.6	427.2	370.8	311.8	253.5	215.5	200.9	200.9	202.8
40°	7542.3	4871.4	605.3	398.0	337.2	270.0	209.2	181.9	173.7	178.1	180.0
42.5°	8074.1	4982.4	527.3	370.8	308.0	230.1	173.7	154.6	152.7	157.2	159.1
45°	8800.4	5185.2	485.5	347.3	276.3	192.7	146.4	133.7	133.7	140.1	142.6
47.5°	9690.3	5482.4	450.0	324.5	244.6	161.0	125.5	117.3	119.2	125.5	127.4
50°	10762.0	5857.6	414.5	299.2	221.8	133.7	109.0	102.7	104.6	112.8	115.4
52.5°	11982.7	6362.1	385.4	276.3	192.7	110.9	91.9	88.1	91.9	100.8	102.7
55°	13029.2	6814.1	349.9	257.3	154.6	91.9	75.4	75.4	79.9	90.0	91.9
57.5°	14036.3	7286.9	318.2	221.8	121.7	73.5	62.7	64.6	71.0	81.8	83.7
60°	15514.3	8088.6	280.8	186.3	91.9	58.3	52.6	54.5	62.7	73.5	75.4
62.5°	18024.2	9309.3	242.7	154.6	71.0	46.3	41.8	46.3	56.4	69.1	71.0
65°	20289.4	9805.6	199.0	129.9	54.5	35.5	35.5	41.8	54.5	67.2	69.1
67.5°	19026.9	8254.1	154.6	102.7	41.8	27.3	29.2	39.9	52.6	67.2	69.1
69°	16826.9	6749.4	131.8	81.8	35.5	25.4	27.3	39.9	52.6	64.6	67.2
70°	15112.5	5698.6	117.3	69.1	31.7	25.4	27.3	37.4	52.6	64.6	67.2
72.5°	10121.9	3077.1	94.4	50.1	29.2	22.8	22.8	37.4	50.1	62.7	64.6
75°	4349.8	849.9	75.4	35.5	25.4	20.9	20.9	35.5	48.2	60.8	64.6
77.5°	795.4	215.5	60.8	31.7	25.4	20.9	19.0	33.6	46.3	58.3	60.8
80°	316.3	106.5	48.2	27.3	22.8	19.0	16.5	31.7	43.7	56.4	58.3
82.5°	190.8	60.8	39.9	25.4	22.8	16.5	14.6	27.3	41.8	54.5	56.4
85°	154.6	41.8	31.7	25.4	20.9	16.5	12.7	25.4	37.4	52.6	54.5
87.5°	75.4	29.2	29.2	22.8	20.9	16.5	12.7	22.8	35.5	50.1	52.6
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)