

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: P453181

Luminaire Tested: **GALN-SA4B-722-U-AFL**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P453181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA4B-722-U-AFL
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 70 CRI, 2200K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16709 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

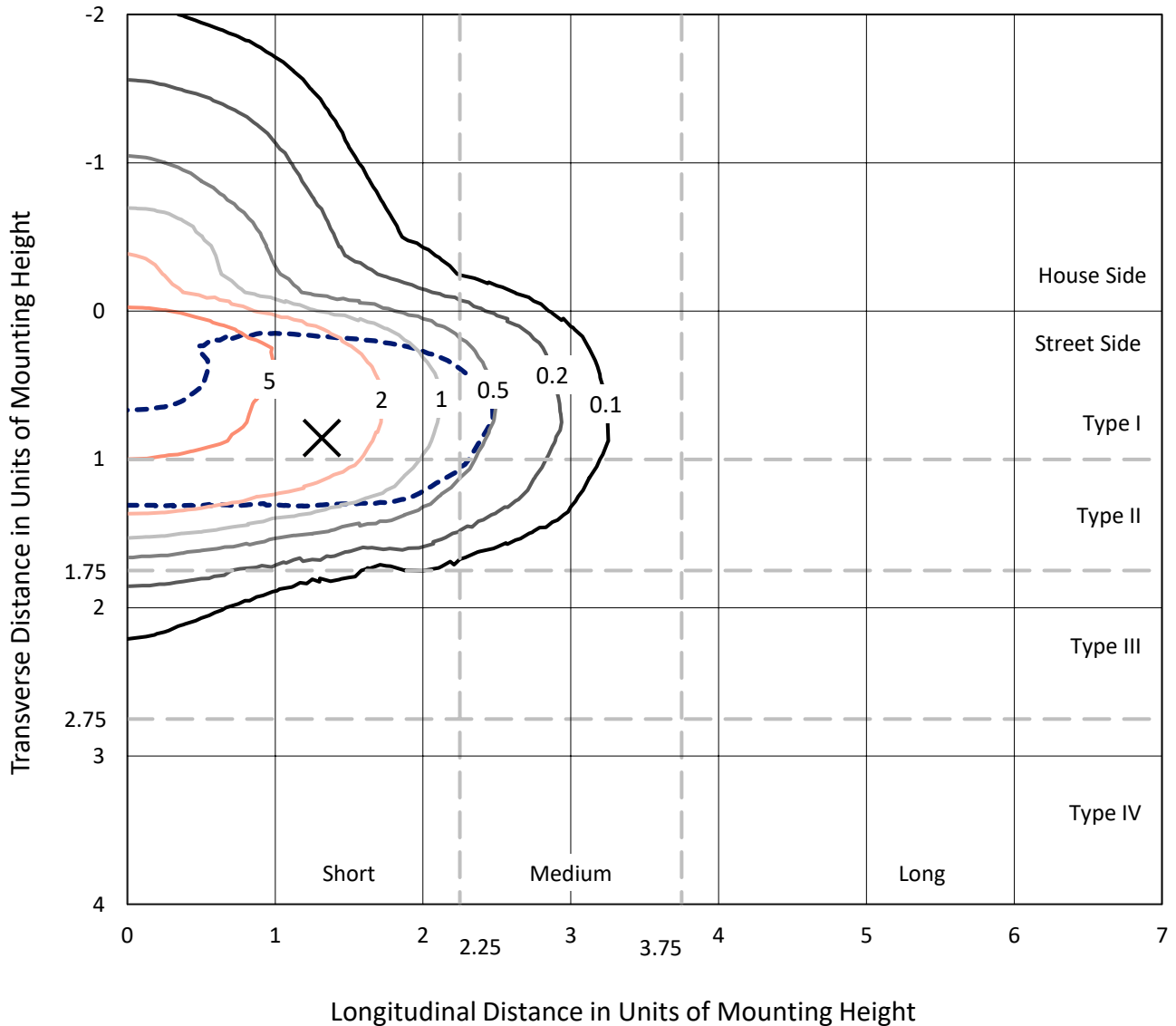
Input Watts (W): 164
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

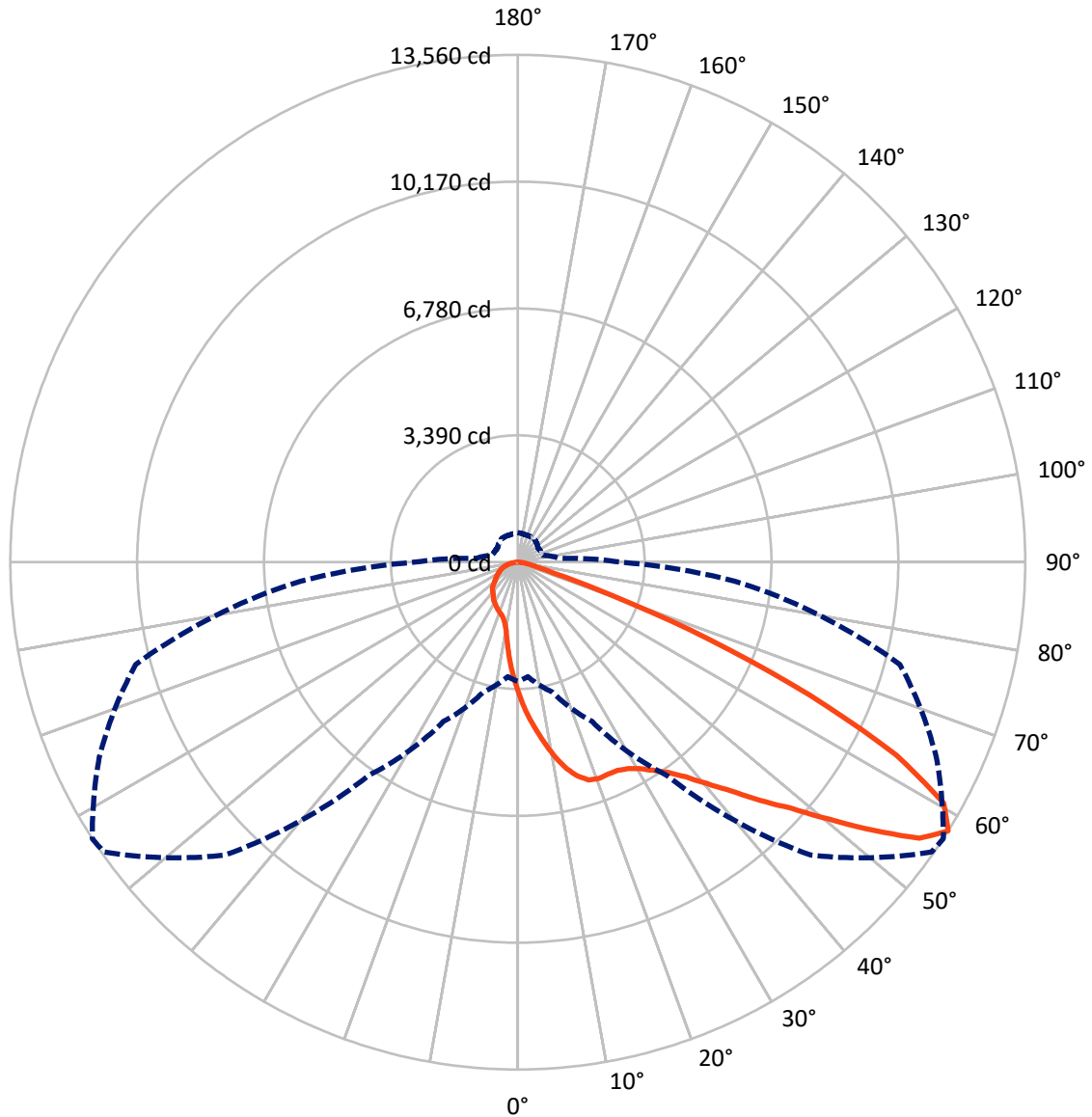
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2541.0	0.0	2541.0
	% Fixture	15.2	0.0	15.2
Street Side	Lumens	14168.0	0.0	14168.0
	% Fixture	84.8	0.0	84.8
Total	Lumens	16709.0	0.0	16709.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	337.4	2.0
10°-20°	994.3	6.0
20°-30°	1651.0	9.9
30°-40°	2486.9	14.9
40°-50°	3733.9	22.3
50°-60°	4185.2	25.0
60°-70°	2449.4	14.7
70°-80°	724.5	4.3
80°-90°	146.4	0.9
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°	16709.0	100.0
0°-180°	16709.0	100.0

Coefficient of Utilization



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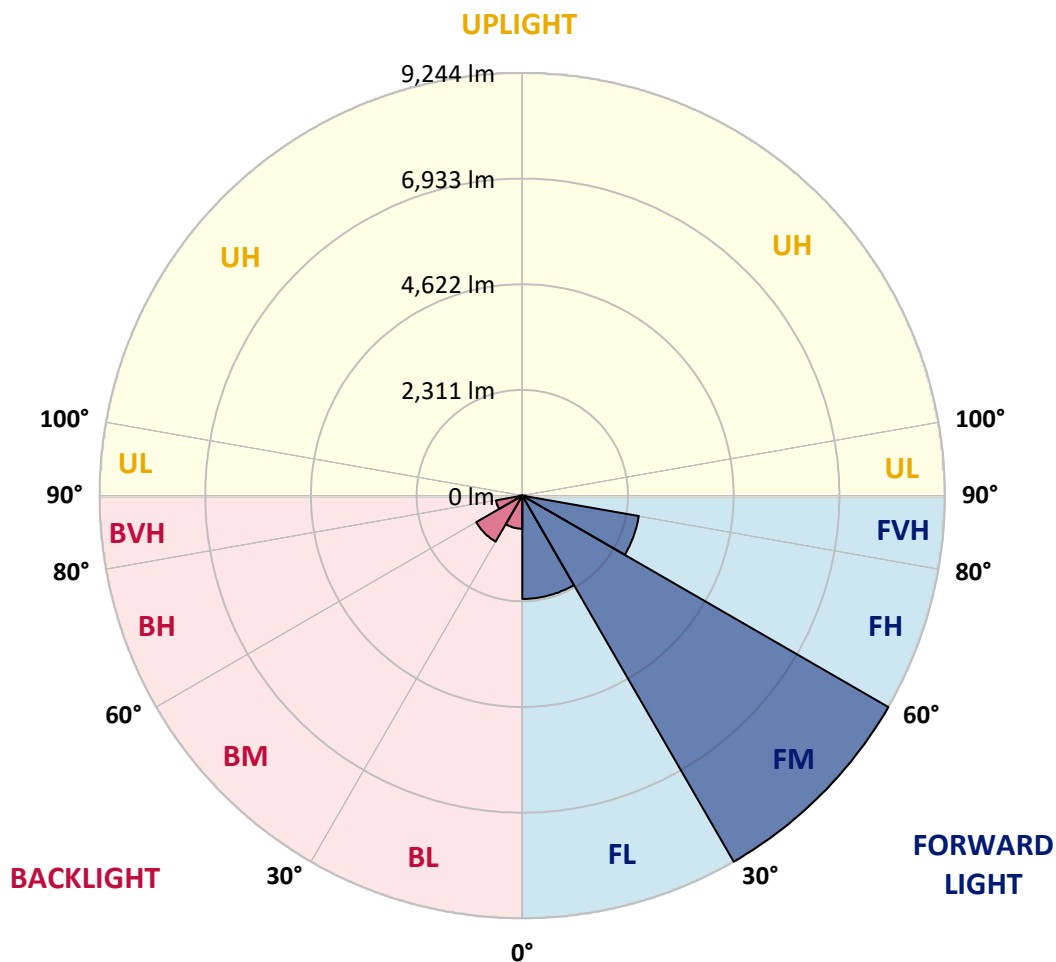
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2258.7	13.5			
FM	(30°-60°)	9244.2	55.3			
FH	(60°-80°)	2589.2	15.5			G2/5000
FVH	(80°-90°)	76.0	0.5			G1/100
BL	(0°-30°)	724.0	4.3	B2/1000		
BM	(30°-60°)	1161.8	7.0	B2/2500		
BH	(60°-80°)	584.7	3.5	B2/1000		G2/1000
BVH	(80°-90°)	70.5	0.4			G1/100
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°	57°	65°	75°	85°
0°	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4
2.5°	4361.9	4314.3	4276.8	4243.9	4200.9	4084.8	3968.6	3966.8	3874.4	3731.7	3585.4
5°	5072.6	5008.5	5016.8	4914.3	4811.9	4643.6	4397.6	4384.8	4188.1	3921.0	3649.4
7.5°	5535.4	5536.3	5510.7	5452.1	5341.5	5150.3	4871.3	4808.2	4534.8	4129.6	3722.6
10°	5511.6	5536.3	5579.3	5629.6	5663.4	5569.2	5314.9	5238.1	4882.3	4382.0	3804.0
12.5°	5195.1	5233.5	5294.8	5421.0	5625.0	5780.5	5693.6	5631.4	5284.8	4633.5	3893.6
15°	4997.6	5020.4	5054.3	5139.3	5358.8	5731.1	5956.1	5923.2	5664.3	4918.0	3994.2
17.5°	4937.2	4960.1	4971.0	5023.2	5179.6	5561.0	6059.5	6118.0	6000.9	5179.6	4095.7
20°	4997.6	5008.5	5008.5	5039.6	5162.2	5461.3	6054.9	6172.9	6277.1	5493.3	4190.9
22.5°	5155.8	5160.4	5154.0	5164.9	5256.4	5488.7	6011.9	6158.2	6500.3	5759.5	4264.9
25°	5412.8	5420.1	5378.1	5352.4	5419.2	5609.5	6035.7	6170.1	6675.0	6013.7	4314.3
27.5°	5704.6	5713.7	5662.5	5603.1	5634.2	5758.5	6129.0	6249.7	6805.8	6264.3	4345.4
30°	6062.2	6065.9	5979.9	5908.5	5888.4	5980.8	6288.1	6400.6	6968.6	6559.8	4392.1
32.5°	6428.1	6455.5	6344.8	6244.2	6210.4	6238.7	6523.2	6632.0	7162.5	6877.1	4467.1
35°	6925.6	6930.2	6797.6	6675.0	6563.4	6600.0	6824.1	6902.8	7430.5	7243.9	4573.2
37.5°	7546.7	7588.7	7405.8	7177.1	7039.9	6986.9	7188.1	7274.1	7806.4	7693.9	4733.2
40°	8236.3	8251.8	8095.4	7952.8	7702.1	7548.5	7687.5	7780.8	8270.1	8230.8	4918.9
42.5°	8669.8	8703.7	8715.6	8700.9	8512.5	8254.6	8307.6	8351.5	8818.9	8734.8	5109.2
45°	8816.2	8866.5	9036.6	9397.0	9417.1	9162.8	9039.3	9081.4	9417.1	9243.3	5291.2
47.5°	8573.8	8659.8	8973.5	9712.5	10265.9	10285.1	9912.8	9820.4	9962.2	9664.9	5422.9
50°	7947.3	7965.6	8445.7	9515.9	10663.7	11357.9	10972.9	10800.9	10479.9	9976.8	5513.4
52.5°	6977.8	6998.8	7401.2	8602.1	10418.6	12107.9	12213.1	11905.8	11005.8	10219.2	5572.9
55°	5179.6	5301.2	5743.9	6904.6	9257.0	12037.5	13199.1	13024.4	11641.5	10411.3	5666.2
57.5°	3184.8	3073.2	3598.2	4697.6	6962.2	11069.8	13503.7	13560.4	12341.2	10572.3	5822.6
60°	1465.2	1487.2	1704.0	2422.9	4243.9	8659.8	12718.9	13077.5	12728.1	10566.8	5861.9
62.5°	1009.8	989.6	934.8	1063.7	1935.4	5476.8	10743.3	11350.6	11952.5	10238.4	5705.5
65°	902.7	882.6	776.5	740.9	889.0	2387.2	7810.1	8576.5	10063.7	9409.8	5315.9
67.5°	843.3	815.9	706.1	636.6	634.8	950.3	4605.2	5528.1	7464.3	7955.5	4606.1
70°	781.1	759.1	650.3	573.5	540.5	597.3	2024.1	2649.7	4846.7	5732.9	3588.1
72.5°	718.9	693.3	595.4	513.1	470.1	447.3	775.6	1008.8	2738.4	3437.2	2199.7
75°	628.4	615.5	532.3	464.6	418.0	361.3	492.1	561.6	1309.8	1578.7	1104.0
77.5°	549.7	536.0	472.9	406.1	372.3	293.6	349.4	381.4	552.4	640.2	498.5
80°	402.4	416.2	398.8	358.5	332.0	230.5	235.1	261.6	328.4	363.1	304.6
82.5°	255.2	280.8	307.3	276.2	251.5	182.0	162.8	172.9	224.1	237.8	135.4
85°	107.0	108.8	178.4	168.3	143.6	107.9	97.9	103.4	119.8	125.3	63.1
87.5°	41.2	40.2	63.1	58.5	44.8	31.1	31.1	34.8	47.6	43.9	20.1
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°	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4	3510.4
2.5°	3522.3	3457.3	3328.4	3168.3	3051.2	2919.5	2803.4	2720.1	2689.0	2674.4	2647.0
5°	3519.5	3391.5	3124.4	2844.5	2619.5	2389.0	2194.2	2068.0	2057.0	1972.9	1964.6
7.5°	3520.4	3324.7	2899.4	2487.8	2144.8	1908.8	1747.9	1705.8	1655.5	1642.7	1649.1
10°	3523.2	3239.6	2657.9	2134.8	1802.7	1648.2	1587.8	1571.3	1573.2	1578.7	1579.6
12.5°	3526.8	3157.3	2407.3	1866.8	1610.7	1546.6	1540.2	1554.9	1570.4	1582.3	1585.1
15°	3531.4	3063.1	2163.1	1650.9	1514.6	1509.1	1530.2	1554.9	1576.8	1594.2	1597.0
17.5°	3525.9	2953.4	1958.2	1518.3	1461.6	1488.1	1522.9	1554.0	1574.1	1590.6	1592.4
20°	3513.1	2830.8	1760.7	1425.0	1428.7	1471.6	1509.1	1538.4	1560.4	1568.6	1575.0
22.5°	3463.7	2684.5	1588.7	1352.7	1389.3	1448.8	1493.6	1511.0	1486.3	1468.9	1473.5
25°	3379.6	2494.2	1428.7	1294.2	1353.7	1416.8	1462.5	1420.4	1400.3	1393.0	1396.6
27.5°	3274.4	2285.7	1307.9	1232.9	1307.9	1381.1	1368.3	1361.0	1351.8	1339.9	1342.7
30°	3161.0	2081.7	1205.5	1185.4	1258.5	1300.6	1306.1	1318.0	1307.9	1289.6	1297.0
32.5°	3055.8	1889.6	1127.7	1145.1	1223.8	1217.4	1258.5	1272.3	1225.6	1164.3	1167.1
35°	2966.2	1711.3	1069.2	1105.8	1164.3	1167.1	1208.2	1160.7	1110.4	1081.1	1082.9
37.5°	2898.5	1572.3	1030.8	1072.0	1088.4	1123.2	1101.2	1076.5	1070.1	1050.0	1050.9
40°	2858.2	1450.6	1006.1	1045.4	1042.7	1066.5	996.0	1020.7	1029.9	1023.5	1024.4
42.5°	2818.0	1364.6	980.5	1008.8	1007.9	961.3	945.7	966.8	990.5	993.3	991.5
45°	2786.0	1297.9	954.0	953.0	971.3	898.2	893.6	906.4	940.2	956.7	955.8
47.5°	2750.3	1242.1	913.7	888.1	893.6	858.8	851.5	857.0	898.2	924.7	932.0
50°	2705.5	1186.3	863.4	828.7	805.8	822.3	824.1	825.0	866.2	896.3	902.7
52.5°	2669.8	1144.2	805.8	780.2	752.7	789.3	803.0	804.9	829.6	854.3	858.8
55°	2690.9	1120.4	749.1	730.8	706.1	755.5	782.0	785.7	791.2	809.5	812.2
57.5°	2754.0	1125.9	703.4	679.6	661.3	715.2	760.1	762.8	759.1	781.1	784.8
60°	2773.2	1123.2	669.5	622.9	611.9	672.3	728.0	733.5	732.6	764.6	771.0
62.5°	2692.7	1088.4	635.7	575.3	568.0	628.4	683.2	705.2	709.8	755.5	763.7
65°	2503.4	1017.1	590.9	525.0	525.0	581.7	640.2	670.4	683.2	744.5	753.7
67.5°	2253.7	932.9	545.1	482.0	480.2	536.9	594.5	625.6	645.7	729.0	734.5
70°	1870.4	819.5	488.4	435.4	435.4	486.6	538.7	576.2	605.5	699.7	699.7
72.5°	1281.4	681.4	419.8	382.3	383.2	430.8	483.8	525.9	560.7	641.2	643.0
75°	810.4	532.3	344.8	325.6	329.3	374.1	429.0	472.9	542.4	633.8	636.6
77.5°	430.8	374.1	274.4	269.8	274.4	315.5	376.8	437.2	544.2	549.7	540.5
80°	279.0	265.2	216.8	207.6	209.5	254.3	335.7	415.2	437.2	442.7	422.6
82.5°	151.8	168.3	153.7	144.5	144.5	198.5	286.3	330.2	313.7	260.7	248.8
85°	64.9	78.7	79.6	69.5	66.8	122.6	192.1	180.2	167.4	160.1	158.2
87.5°	18.3	25.6	25.6	19.2	14.6	33.8	38.4	11.0	0.0	0.9	1.8
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)