

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: P652364

Luminaire Tested: **GALN-SA4B-840-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P652364
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-29)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA4B-840-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(4) 80 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13631.8 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

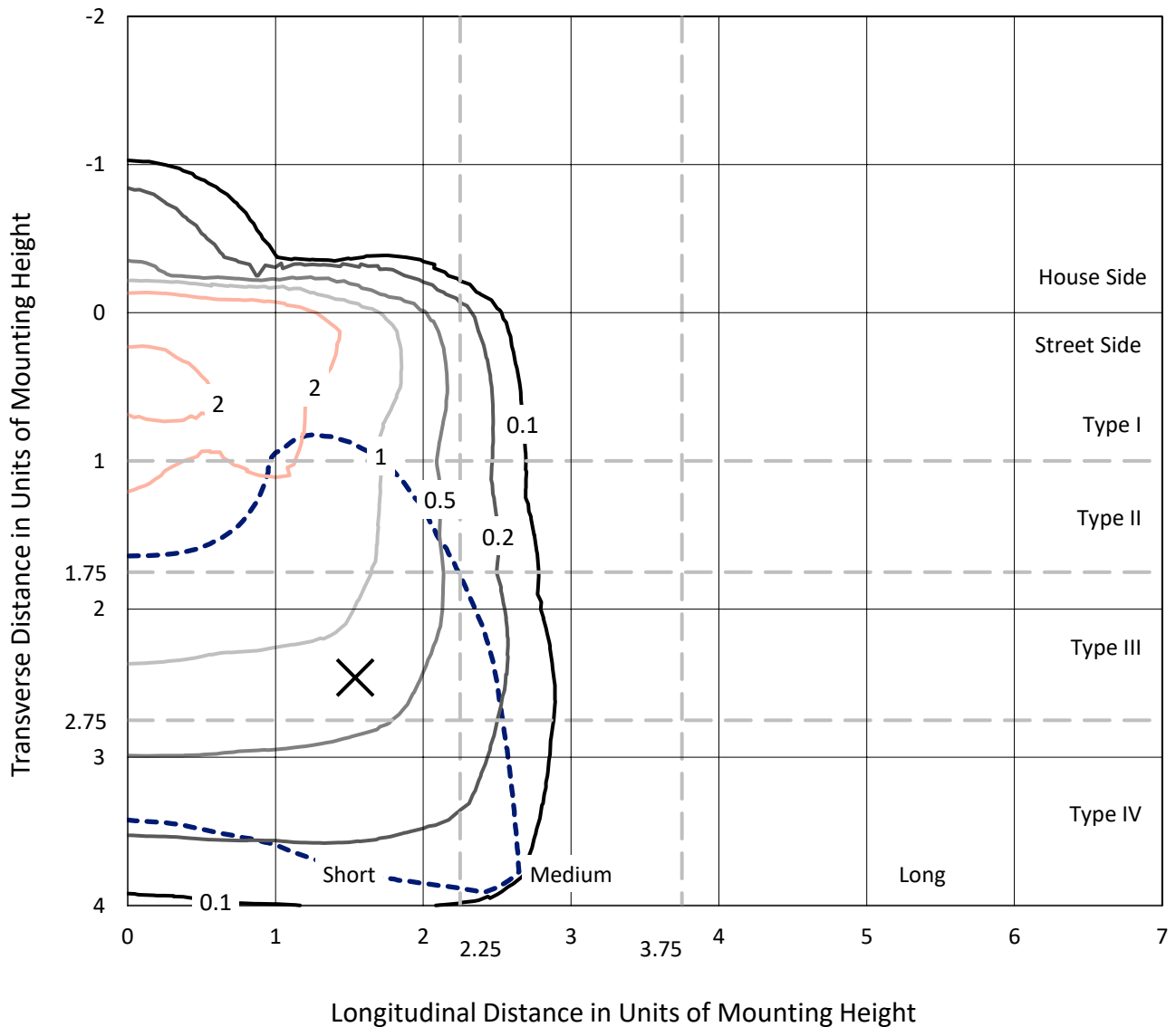
Input Watts (W): 164
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

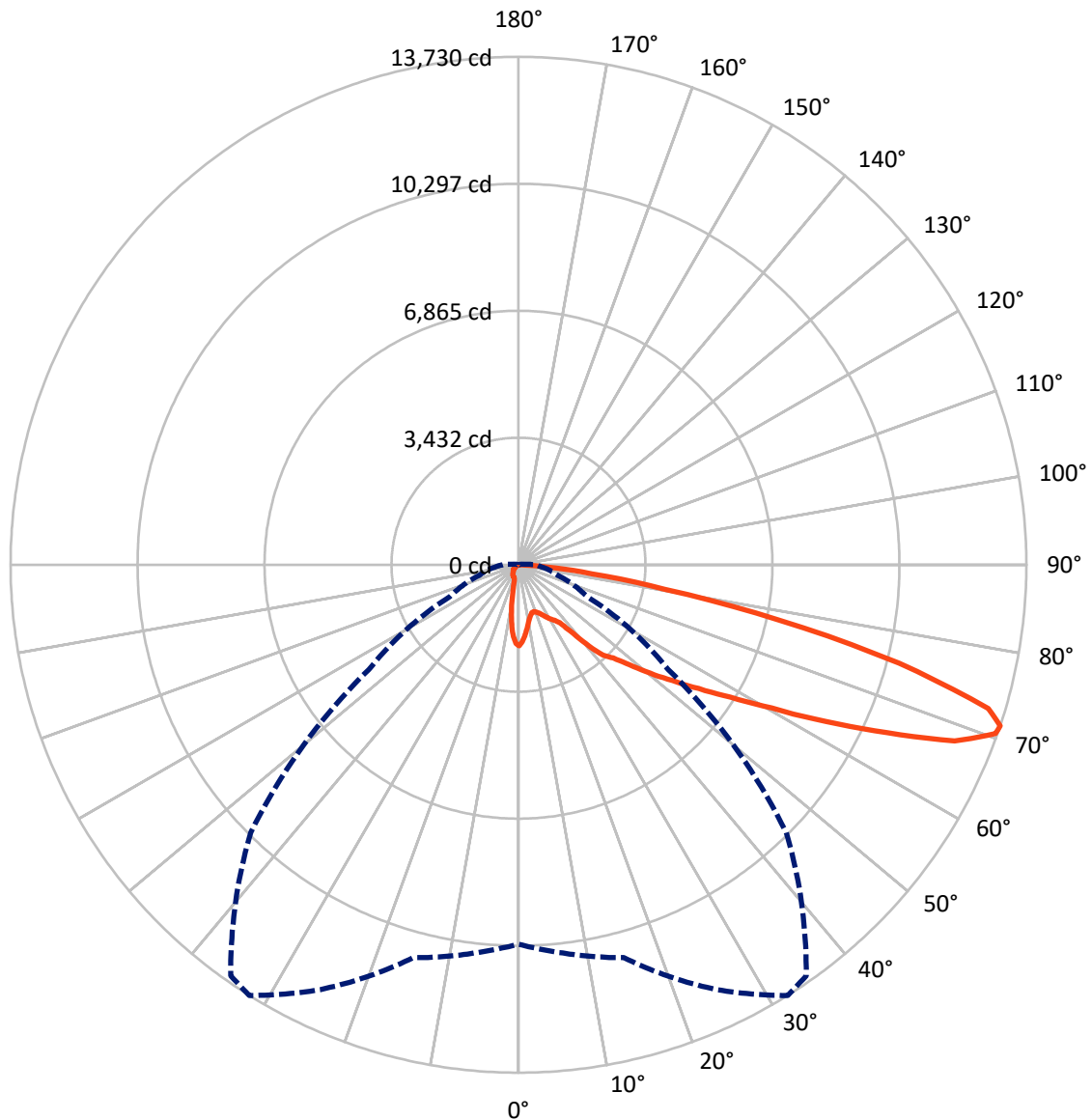
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 32-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1141.8	0.0	1141.8
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	12490.0	0.0	12490.0
	% Fixture	91.6	0.0	91.6
Total	Lumens	13631.8	0.0	13631.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.3	1.3
10°-20°	386.9	2.8
20°-30°	601.8	4.4
30°-40°	1002.7	7.4
40°-50°	1865.2	13.7
50°-60°	2994.6	22.0
60°-70°	4027.9	29.5
70°-80°	2389.8	17.5
80°-90°	184.7	1.4
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°	13631.8	100.0
0°-180°	13631.8	100.0

Coefficient of Utilization



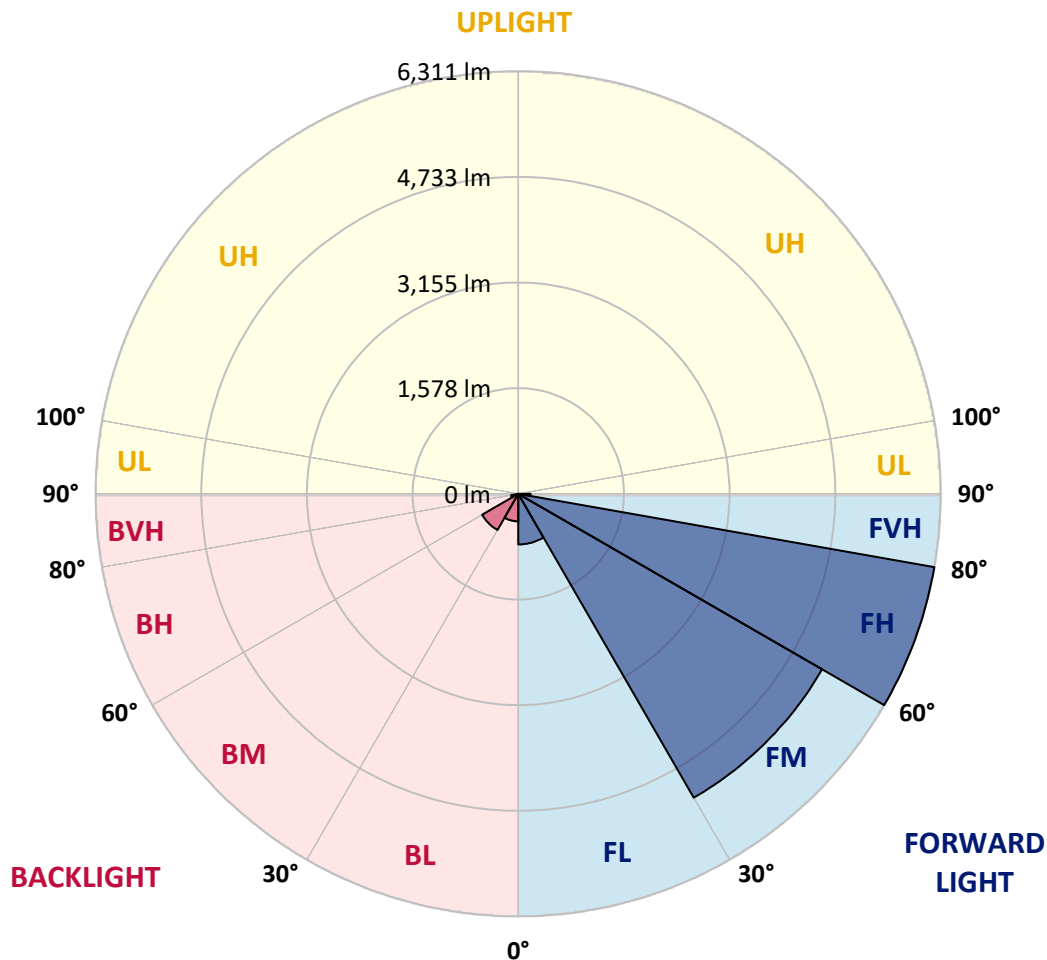
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	755.6	5.5			
FM (30°-60°)	5239.6	38.4			
FH (60°-80°)	6310.8	46.3			G3/7500
FVH (80°-90°)	184.0	1.3			G2/225
BL (0°-30°)	411.4	3.0	B1/500		
BM (30°-60°)	622.9	4.6	B1/1000		
BH (60°-80°)	106.8	0.8	B0/110		G0/110
BVH (80°-90°)	0.7	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-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2
2.5°	2033.1	2054.1	2050.9	2058.3	2076.1	2083.4	2103.3	2125.2	2155.6	2176.5	2190.1
5°	1820.8	1836.4	1838.5	1875.2	1892.9	1912.9	1971.4	2035.2	2106.4	2162.9	2200.6
7.5°	1593.7	1602.0	1618.8	1666.9	1711.9	1731.8	1820.8	1931.6	2043.6	2149.3	2217.3
10°	1406.3	1415.7	1446.1	1497.4	1539.3	1565.4	1688.9	1828.1	1985.0	2141.9	2241.3
12.5°	1299.6	1304.9	1316.3	1362.4	1415.7	1444.0	1577.0	1736.0	1937.9	2145.1	2282.2
15°	1292.3	1290.2	1276.6	1295.5	1343.6	1372.8	1502.6	1673.2	1896.0	2155.6	2330.3
17.5°	1331.1	1325.8	1293.4	1293.4	1333.1	1357.2	1471.2	1639.7	1875.2	2179.6	2398.4
20°	1390.7	1382.3	1328.9	1324.7	1363.4	1388.6	1490.1	1641.8	1879.3	2224.6	2489.4
22.5°	1466.0	1456.6	1376.0	1378.1	1419.9	1445.1	1544.5	1679.5	1905.5	2280.1	2586.7
25°	1564.3	1553.9	1458.7	1454.5	1498.4	1520.4	1625.1	1746.4	1942.1	2349.2	2714.3
27.5°	1695.2	1673.2	1559.1	1552.8	1599.9	1628.2	1722.4	1836.4	2007.0	2444.4	2886.0
30°	1802.9	1778.9	1670.1	1653.3	1703.5	1725.5	1822.8	1957.8	2134.6	2610.8	3123.5
32.5°	1944.2	1908.6	1781.0	1737.0	1790.4	1818.7	1968.3	2183.8	2324.0	2786.6	3406.0
35°	2262.3	2240.3	2084.4	1930.6	1927.5	1963.1	2182.8	2411.9	2518.7	3060.7	3791.1
37.5°	2717.5	2701.8	2536.5	2330.3	2270.7	2254.0	2443.4	2663.1	2829.5	3437.4	4239.0
40°	3245.9	3209.3	3057.5	2882.9	2805.4	2756.2	2751.0	3036.7	3235.5	3949.1	4705.6
42.5°	3624.7	3557.8	3373.6	3361.1	3344.3	3293.0	3144.4	3582.8	3759.7	4499.5	5204.8
45°	4022.3	3920.8	3646.7	3599.6	3593.3	3590.2	3738.7	4229.6	4331.1	5096.0	5717.5
47.5°	4331.1	4250.5	4025.5	4004.6	4030.7	4101.9	4524.6	4916.0	4895.0	5627.6	6147.5
50°	4742.2	4681.6	4431.5	4471.3	4606.2	4722.4	5410.9	5664.1	5358.6	6046.1	6460.5
52.5°	5227.8	5115.8	4883.5	4991.3	5198.5	5392.1	6351.7	6319.2	5684.1	6361.1	6693.8
55°	5648.4	5568.9	5489.4	5601.4	5911.1	6152.8	7201.3	6809.9	5920.5	6614.3	6796.4
57.5°	6360.0	6341.1	6259.6	6373.6	6749.3	7000.4	7962.0	7190.8	6072.3	6746.1	6676.0
60°	7412.7	7382.3	7230.6	7376.1	7865.8	8260.2	8663.1	7533.0	6106.8	6694.9	6329.6
62.5°	8678.8	8575.3	8445.5	8659.9	9331.7	9505.5	9323.4	7736.0	5978.1	6286.7	5494.6
65°	9861.2	9754.5	9757.6	10209.7	10941.2	11059.4	10093.5	7705.7	5601.4	5264.4	4052.7
67.5°	10766.4	10748.6	10876.2	11758.4	12714.7	12633.2	10782.0	7251.5	4484.9	3412.3	2153.5
70°	10812.4	10847.0	11213.2	12702.2	13673.2	13543.5	10723.5	5894.3	2796.0	1569.6	848.7
71°	10255.7	10488.0	10994.5	12672.9	13729.7	13561.3	10229.6	4936.9	2050.9	1094.6	612.2
72.5°	8739.5	8862.0	9956.4	11926.8	13282.9	12923.0	8977.0	3460.5	1313.2	669.7	351.6
75°	4813.5	5114.8	6667.6	9356.9	10624.1	10308.1	5850.4	1643.9	655.1	366.3	145.4
77.5°	2291.6	2233.0	3253.2	5564.7	7203.4	7186.7	2947.7	730.4	381.9	248.0	73.3
80°	655.1	736.6	1245.2	2645.3	3999.3	4043.3	1132.2	352.6	264.7	193.6	37.7
82.5°	197.8	201.9	457.3	1169.8	1989.2	1875.2	424.9	180.0	190.4	153.8	22.0
85°	34.6	42.9	135.0	412.3	758.7	575.5	106.7	85.8	125.6	101.5	12.5
87.5°	2.1	3.1	45.0	47.1	66.9	38.7	18.8	12.5	27.2	27.2	7.3
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°	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2	2192.2
2.5°	2199.6	2205.8	2201.7	2192.2	2176.5	2157.7	2132.5	2111.7	2093.8	2084.4	2095.9
5°	2213.1	2221.5	2200.6	2153.5	2082.3	2004.9	1917.0	1849.0	1795.6	1778.9	1772.6
7.5°	2234.0	2239.3	2182.8	2078.1	1927.5	1744.3	1584.3	1449.3	1344.6	1313.2	1267.2
10°	2261.3	2258.1	2151.4	1956.8	1692.0	1416.8	1168.8	984.6	845.5	795.2	791.0
12.5°	2303.1	2286.3	2111.7	1791.4	1411.6	1051.7	745.0	582.8	494.9	465.7	459.4
15°	2355.5	2315.7	2048.8	1597.8	1080.9	679.1	459.4	410.2	398.7	396.6	394.5
17.5°	2417.2	2354.4	1966.2	1360.3	759.7	440.5	384.0	383.0	384.0	381.9	380.9
20°	2500.9	2395.2	1867.8	1078.8	502.2	371.5	366.3	366.3	367.3	366.3	366.3
22.5°	2589.9	2443.4	1746.4	823.5	378.8	352.6	351.6	353.6	355.7	354.7	354.7
25°	2699.7	2506.1	1586.4	564.0	339.0	336.9	338.0	342.2	346.3	347.4	346.3
27.5°	2858.7	2583.6	1414.7	388.2	310.7	312.9	323.4	333.8	340.1	341.1	341.1
30°	3037.7	2669.3	1190.8	315.0	287.8	287.8	300.3	320.2	333.8	335.9	336.9
32.5°	3267.9	2768.7	942.8	283.6	265.8	263.7	275.2	299.2	324.4	331.7	331.7
35°	3552.6	2886.0	701.1	263.7	250.1	244.8	251.1	271.1	303.4	324.4	326.5
37.5°	3886.3	2996.9	512.8	245.9	235.5	228.1	232.3	248.0	274.2	305.5	313.9
40°	4195.0	3095.2	383.0	231.3	220.8	215.5	218.7	226.1	248.0	277.3	282.5
42.5°	4532.0	3171.7	304.5	215.5	206.1	204.0	204.0	207.2	221.9	238.6	239.6
45°	4867.9	3198.8	255.3	196.7	190.4	192.5	191.5	189.4	195.7	193.6	193.6
47.5°	5107.5	3166.4	211.3	179.0	179.0	182.1	176.9	169.5	166.3	153.8	154.8
50°	5271.7	3048.1	173.7	158.0	166.3	170.6	160.1	148.6	137.1	123.5	120.3
52.5°	5339.8	2837.8	142.3	130.8	147.5	152.8	140.2	126.7	108.8	97.3	94.2
55°	5295.8	2578.3	118.2	106.7	124.6	130.8	118.2	102.5	82.7	70.1	68.0
57.5°	5102.3	2268.6	100.4	84.8	99.4	103.6	95.2	78.5	58.6	46.0	46.0
60°	4767.4	1948.4	81.6	66.9	74.3	80.6	72.2	56.5	39.8	28.3	26.2
62.5°	4088.3	1582.2	65.9	52.3	52.3	57.5	50.2	40.8	25.1	14.6	13.6
65°	2951.9	1085.1	52.3	38.7	37.7	37.7	31.4	27.2	14.6	6.3	4.2
67.5°	1604.1	612.2	41.9	29.3	26.2	25.1	19.8	15.7	6.3	1.0	0.0
70°	631.0	235.5	32.5	19.8	16.7	15.7	10.4	7.3	4.2	0.0	0.0
71°	428.0	162.2	28.3	16.7	13.6	11.5	8.4	6.3	3.1	0.0	0.0
72.5°	244.8	100.4	22.0	12.5	10.4	8.4	6.3	4.2	3.1	0.0	0.0
75°	106.7	51.3	13.6	9.4	7.3	5.2	4.2	3.1	1.0	0.0	0.0
77.5°	54.4	28.3	9.4	7.3	4.2	3.1	2.1	1.0	0.0	0.0	0.0
80°	30.4	14.6	6.3	4.2	3.1	2.1	1.0	1.0	0.0	0.0	0.0
82.5°	16.7	8.4	3.1	2.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	10.4	5.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.2	2.1	0.0	0.0	0.0	0.0	1.0	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)