

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: P459002

Luminaire Tested: **GALN-SA5A-735-U-T4FT-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P459002
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-SA5A-735-U-T4FT-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 3500K, 615mA 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: 15362 lumens
Efficiency: N/A
Efficacy: 99.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G3

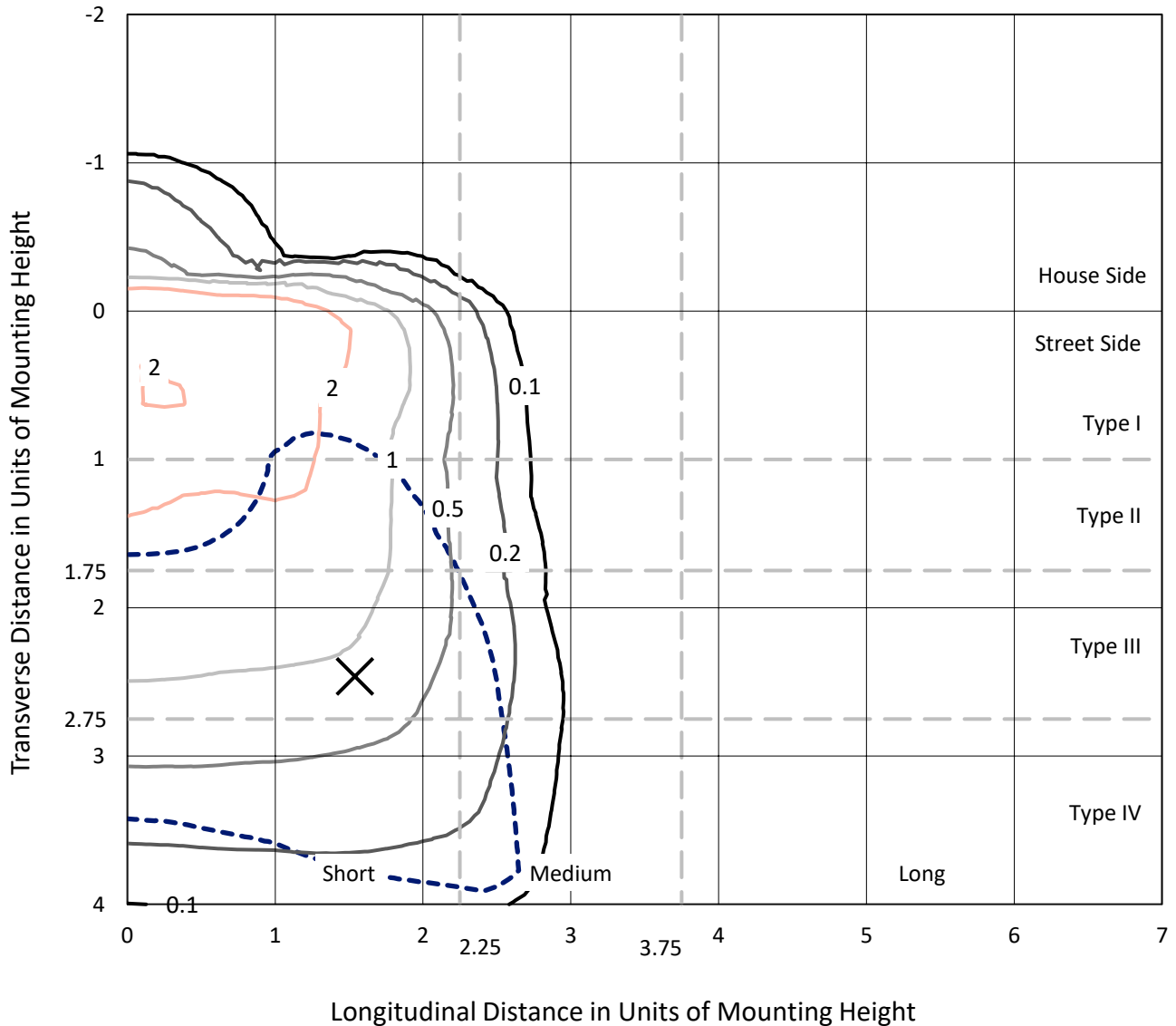
Input Watts (W): 154
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P459002
 CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

Iso-Footcandle Lines of Horizontal Illumination

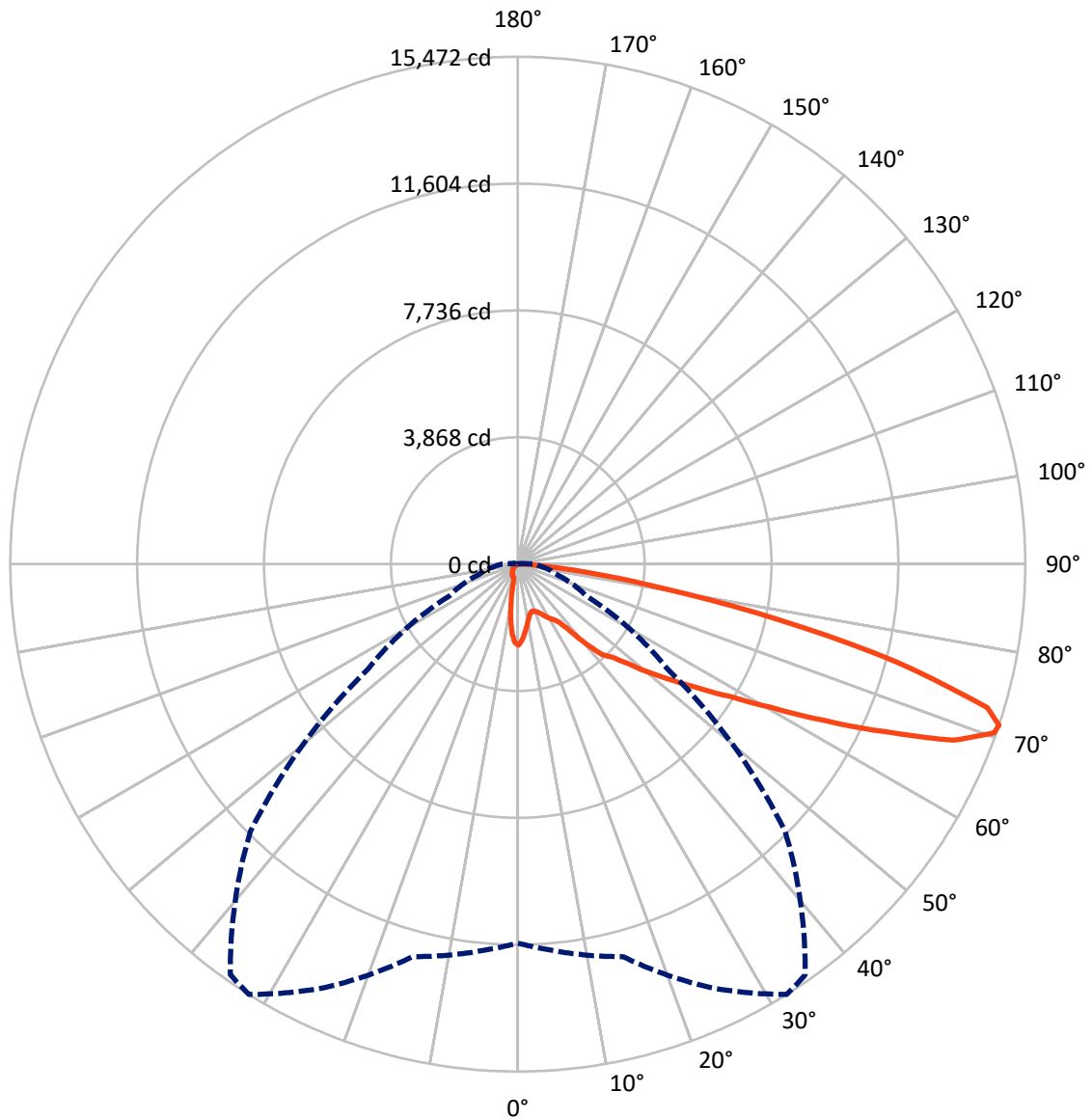
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 fc
 Type IV - Short - N/A

REPORT NUMBER: P459002
CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P459002

CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

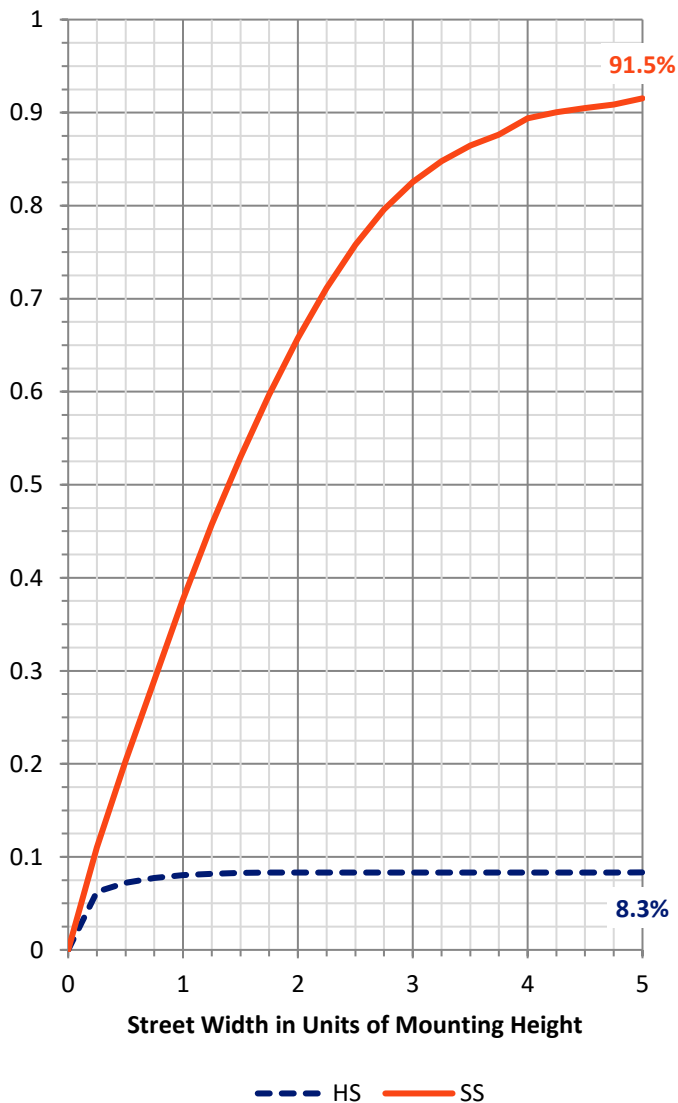
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1286.7	0.0	1286.7
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	14075.3	0.0	14075.3
	% Fixture	91.6	0.0	91.6
Total	Lumens	15362.0	0.0	15362.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.9	1.3
10°-20°	436.0	2.8
20°-30°	678.2	4.4
30°-40°	1130.0	7.4
40°-50°	2101.9	13.7
50°-60°	3374.7	22.0
60°-70°	4539.1	29.5
70°-80°	2693.1	17.5
80°-90°	208.2	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°	15362.0	100.0
0°-180°	15362.0	100.0



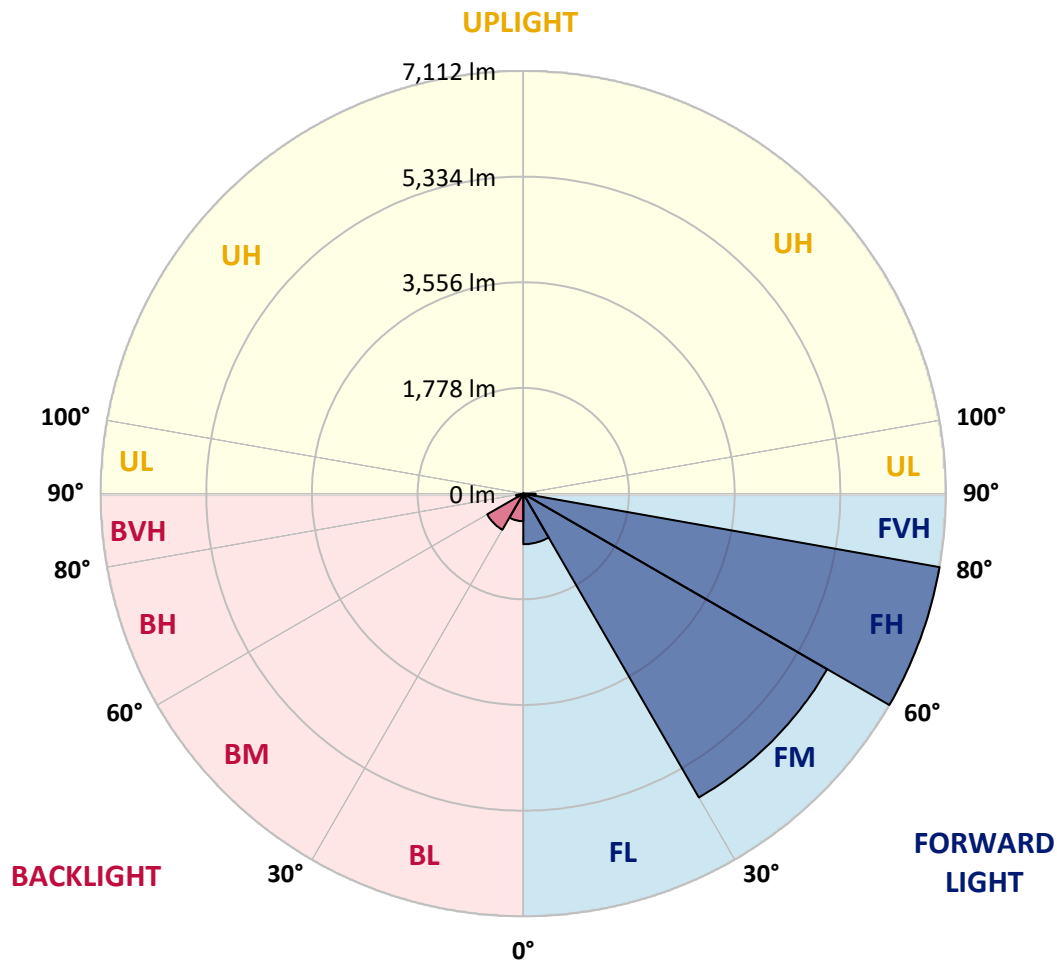
REPORT NUMBER: P459002
 CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	851.5	5.5			
FM	(30°-60°)	5904.6	38.4			
FH	(60°-80°)	7111.9	46.3			G3/7500
FVH	(80°-90°)	207.4	1.3			G2/225
BL	(0°-30°)	463.6	3.0	B1/500		
BM	(30°-60°)	701.9	4.6	B1/1000		
BH	(60°-80°)	120.4	0.8	B1/500		G1/500
BVH	(80°-90°)	0.8	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





REPORT NUMBER: P459002

CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4
2.5°	2291.2	2314.8	2311.3	2319.5	2339.6	2347.8	2370.2	2395.0	2429.2	2452.8	2468.1
5°	2051.8	2069.5	2071.9	2113.1	2133.2	2155.6	2221.6	2293.6	2373.8	2437.4	2479.9
7.5°	1795.9	1805.4	1824.2	1878.5	1929.2	1951.6	2051.8	2176.8	2303.0	2422.1	2498.8
10°	1584.9	1595.5	1629.7	1687.5	1734.6	1764.1	1903.2	2060.1	2237.0	2413.8	2525.9
12.5°	1464.6	1470.5	1483.4	1535.3	1595.5	1627.3	1777.1	1956.3	2183.9	2417.4	2571.9
15°	1456.3	1454.0	1438.6	1459.9	1514.1	1547.1	1693.3	1885.6	2136.7	2429.2	2626.1
17.5°	1500.0	1494.1	1457.5	1457.5	1502.3	1529.4	1658.0	1847.8	2113.1	2456.3	2702.8
20°	1567.2	1557.7	1497.6	1492.9	1536.5	1564.8	1679.2	1850.2	2117.9	2507.0	2805.3
22.5°	1652.1	1641.5	1550.7	1553.0	1600.2	1628.5	1740.5	1892.6	2147.3	2569.5	2915.0
25°	1762.9	1751.1	1643.8	1639.1	1688.6	1713.4	1831.3	1968.1	2188.6	2647.3	3058.9
27.5°	1910.3	1885.6	1757.0	1750.0	1803.0	1834.9	1941.0	2069.5	2261.7	2754.6	3252.3
30°	2031.8	2004.7	1882.0	1863.2	1919.8	1944.5	2054.2	2206.3	2405.6	2942.1	3519.9
32.5°	2191.0	2150.9	2007.0	1957.5	2017.6	2049.5	2218.1	2461.0	2619.0	3140.2	3838.3
35°	2549.5	2524.7	2349.0	2175.6	2172.1	2212.2	2459.8	2718.1	2838.4	3449.2	4272.3
37.5°	3062.4	3044.7	2858.4	2626.1	2558.9	2540.0	2753.5	3001.1	3188.6	3873.7	4777.0
40°	3657.9	3616.6	3445.7	3248.7	3161.5	3106.0	3100.1	3422.1	3646.1	4450.3	5302.9
42.5°	4084.8	4009.3	3801.8	3787.6	3768.8	3711.0	3543.5	4037.6	4236.9	5070.6	5865.4
45°	4532.9	4418.5	4109.6	4056.5	4049.4	4045.9	4213.3	4766.4	4880.8	5742.8	6443.2
47.5°	4880.8	4790.0	4536.4	4512.8	4542.3	4622.5	5098.9	5539.9	5516.4	6341.8	6927.9
50°	5344.2	5275.8	4994.0	5038.8	5190.9	5321.8	6097.7	6383.1	6038.7	6813.5	7280.5
52.5°	5891.3	5765.2	5503.4	5624.8	5858.3	6076.5	7157.8	7121.3	6405.5	7168.4	7543.4
55°	6365.4	6275.8	6186.1	6312.3	6661.4	6933.8	8115.3	7674.3	6672.0	7453.8	7659.0
57.5°	7167.3	7146.0	7054.0	7182.6	7605.9	7888.9	8972.6	8103.5	6843.0	7602.4	7523.4
60°	8353.5	8319.3	8148.4	8312.3	8864.1	9308.7	9762.7	8489.1	6881.9	7544.6	7133.1
62.5°	9780.4	9663.6	9517.4	9759.2	10516.2	10712.0	10506.8	8717.9	6736.8	7084.7	6192.0
65°	11112.9	10992.6	10996.2	11505.6	12329.8	12463.1	11374.7	8683.7	6312.3	5932.6	4567.1
67.5°	12132.9	12112.9	12256.7	13250.8	14328.6	14236.6	12150.6	8171.9	5054.1	3845.4	2426.8
70°	12184.8	12223.7	12636.4	14314.5	15408.8	15262.5	12084.6	6642.5	3150.9	1768.8	956.3
71°	11557.5	11819.2	12390.0	14281.4	15472.4	15282.6	11528.0	5563.5	2311.3	1233.5	689.8
72.5°	9848.8	9986.7	11220.2	13440.7	14968.9	14563.3	10116.5	3899.7	1479.9	754.7	396.2
75°	5424.4	5764.0	7513.9	10544.5	11972.5	11616.4	6593.0	1852.5	738.2	412.7	163.9
77.5°	2582.5	2516.4	3666.2	6271.1	8117.7	8098.8	3321.8	823.1	430.4	279.5	82.5
80°	738.2	830.2	1403.3	2981.0	4506.9	4556.5	1275.9	397.4	298.3	218.2	42.5
82.5°	222.9	227.6	515.3	1318.4	2241.7	2113.1	478.8	202.8	214.6	173.3	24.8
85°	38.9	48.3	152.1	464.6	854.9	648.6	120.3	96.7	141.5	114.4	14.2
87.5°	2.4	3.5	50.7	53.1	75.5	43.6	21.2	14.2	30.7	30.7	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P459002

CATALOG NUMBER: GALN-SA5A-735-U-T4FT-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4	2470.4
2.5°	2478.7	2485.8	2481.1	2470.4	2452.8	2431.5	2403.2	2379.7	2359.6	2349.0	2362.0
5°	2494.0	2503.5	2479.9	2426.8	2346.6	2259.4	2160.3	2083.7	2023.5	2004.7	1997.6
7.5°	2517.6	2523.5	2459.8	2341.9	2172.1	1965.7	1785.3	1633.2	1515.3	1479.9	1428.0
10°	2548.3	2544.7	2424.5	2205.1	1906.8	1596.7	1317.2	1109.6	952.8	896.2	891.5
12.5°	2595.4	2576.6	2379.7	2018.8	1590.8	1185.1	839.6	656.8	557.8	524.7	517.7
15°	2654.4	2609.6	2308.9	1800.7	1218.1	765.3	517.7	462.3	449.3	446.9	444.6
17.5°	2724.0	2653.2	2215.7	1533.0	856.1	496.4	432.8	431.6	432.8	430.4	429.2
20°	2818.3	2699.2	2104.9	1215.8	566.0	418.6	412.7	412.7	413.9	412.7	412.7
22.5°	2918.6	2753.5	1968.1	928.0	426.9	397.4	396.2	398.6	400.9	399.8	399.8
25°	3042.4	2824.2	1787.7	635.6	382.1	379.7	380.9	385.6	390.3	391.5	390.3
27.5°	3221.6	2911.5	1594.3	437.5	350.2	352.6	364.4	376.2	383.2	384.4	384.4
30°	3423.3	3008.2	1341.9	354.9	324.3	324.3	338.4	360.8	376.2	378.5	379.7
32.5°	3682.7	3120.2	1062.5	319.6	299.5	297.2	310.1	337.3	365.6	373.8	373.8
35°	4003.4	3252.3	790.1	297.2	281.8	275.9	283.0	305.4	342.0	365.6	367.9
37.5°	4379.6	3377.3	577.8	277.1	265.3	257.1	261.8	279.5	309.0	344.3	353.8
40°	4727.5	3488.1	431.6	260.6	248.8	242.9	246.5	254.7	279.5	312.5	318.4
42.5°	5107.2	3574.2	343.2	242.9	232.3	229.9	229.9	233.5	250.0	268.9	270.0
45°	5485.7	3604.9	287.7	221.7	214.6	217.0	215.8	213.4	220.5	218.2	218.2
47.5°	5755.7	3568.3	238.2	201.6	201.6	205.2	199.3	191.0	187.5	173.3	174.5
50°	5940.9	3435.0	195.7	178.1	187.5	192.2	180.4	167.4	154.5	139.1	135.6
52.5°	6017.5	3198.0	160.4	147.4	166.3	172.2	158.0	142.7	122.6	109.7	106.1
55°	5968.0	2905.6	133.3	120.3	140.3	147.4	133.3	115.6	93.2	79.0	76.6
57.5°	5749.8	2556.5	113.2	95.5	112.0	116.7	107.3	88.4	66.0	51.9	51.9
60°	5372.5	2195.7	92.0	75.5	83.7	90.8	81.4	63.7	44.8	31.8	29.5
62.5°	4607.2	1783.0	74.3	59.0	59.0	64.9	56.6	46.0	28.3	16.5	15.3
65°	3326.6	1222.8	59.0	43.6	42.5	42.5	35.4	30.7	16.5	7.1	4.7
67.5°	1807.7	689.8	47.2	33.0	29.5	28.3	22.4	17.7	7.1	1.2	0.0
70°	711.1	265.3	36.6	22.4	18.9	17.7	11.8	8.3	4.7	0.0	0.0
71°	482.3	182.8	31.8	18.9	15.3	13.0	9.4	7.1	3.5	0.0	0.0
72.5°	275.9	113.2	24.8	14.2	11.8	9.4	7.1	4.7	3.5	0.0	0.0
75°	120.3	57.8	15.3	10.6	8.3	5.9	4.7	3.5	1.2	0.0	0.0
77.5°	61.3	31.8	10.6	8.3	4.7	3.5	2.4	1.2	0.0	0.0	0.0
80°	34.2	16.5	7.1	4.7	3.5	2.4	1.2	1.2	0.0	0.0	0.0
82.5°	18.9	9.4	3.5	2.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0
85°	11.8	5.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	5.9	2.4	0.0	0.0	0.0	0.0	1.2	1.2	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)