

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: P651814

Luminaire Tested: **GALN-SA3A-840-U-T4FT-HSS**

Issue Date: 1/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P651814  
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-SA3A-840-U-T4FT-HSS  
Description: GALLEON AREA AND ROADWAY LUMINAIRE  
(3) 80 CRI, 4000K, 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: 8267 lumens  
Efficiency: N/A  
Efficacy: 88.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B1 - U0 - G2

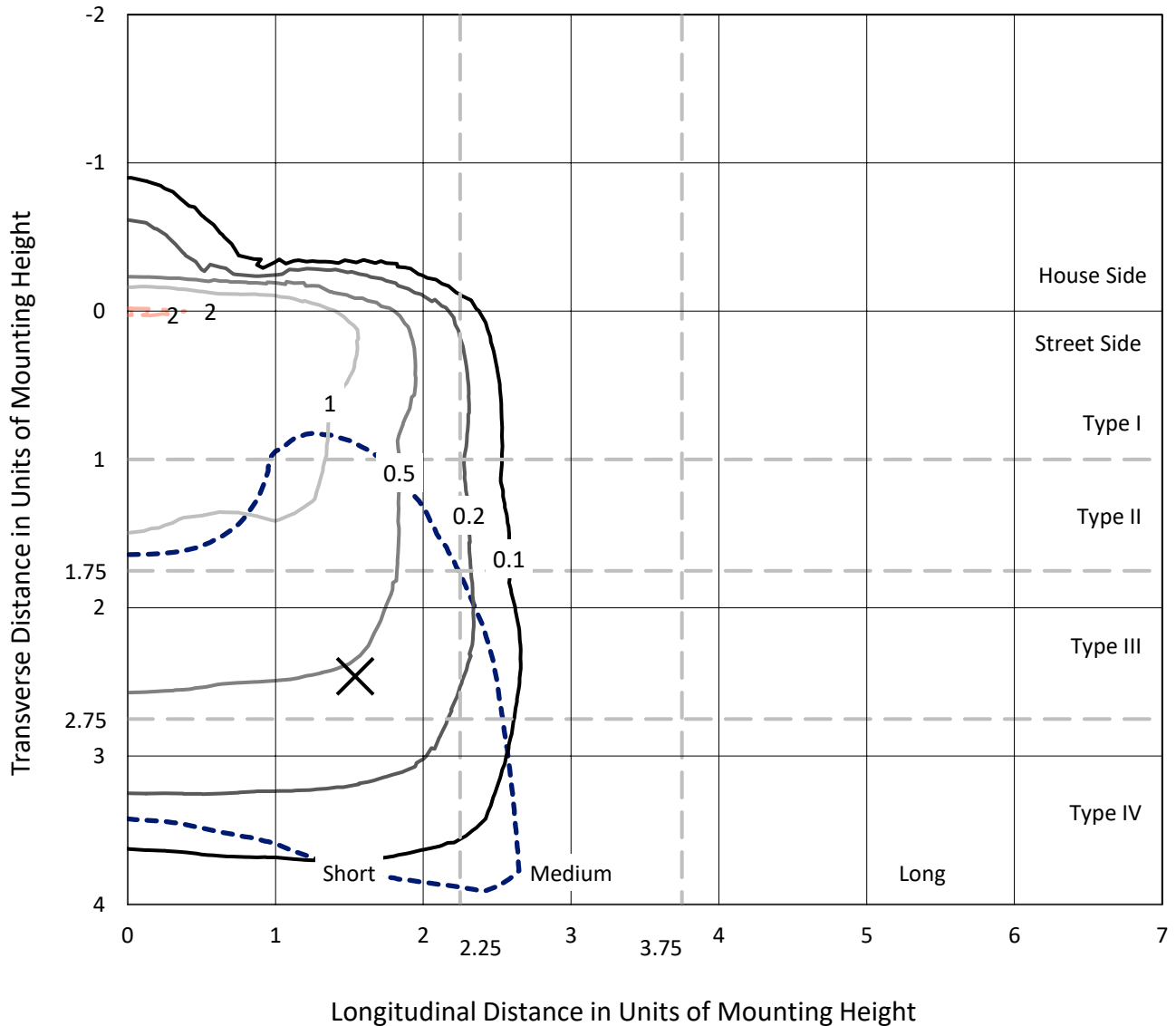
Input Watts (W): 93  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

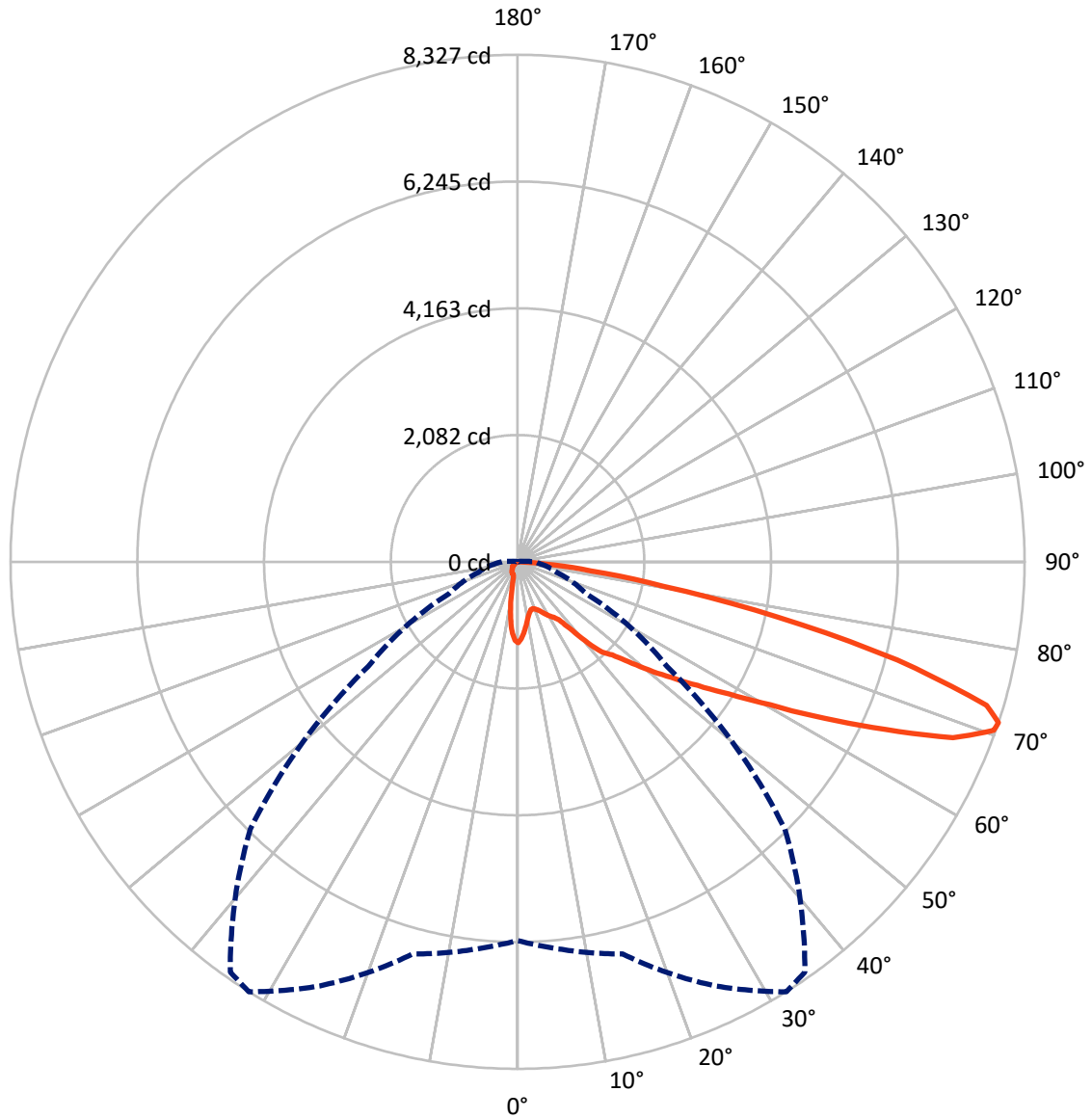
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 2.1 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
<b>House Side</b>	Lumens	692.5	0.0	692.5
	% Fixture	8.4	0.0	8.4
<b>Street Side</b>	Lumens	7574.6	0.0	7574.6
	% Fixture	91.6	0.0	91.6
<b>Total</b>	Lumens	8267.0	0.0	8267.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.1	1.3
10°-20°	234.6	2.8
20°-30°	365.0	4.4
30°-40°	608.1	7.4
40°-50°	1131.1	13.7
50°-60°	1816.1	22.0
60°-70°	2442.7	29.5
70°-80°	1449.3	17.5
80°-90°	112.0	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°	8267.0	100.0
0°-180°	8267.0	100.0

**Coefficient of Utilization**

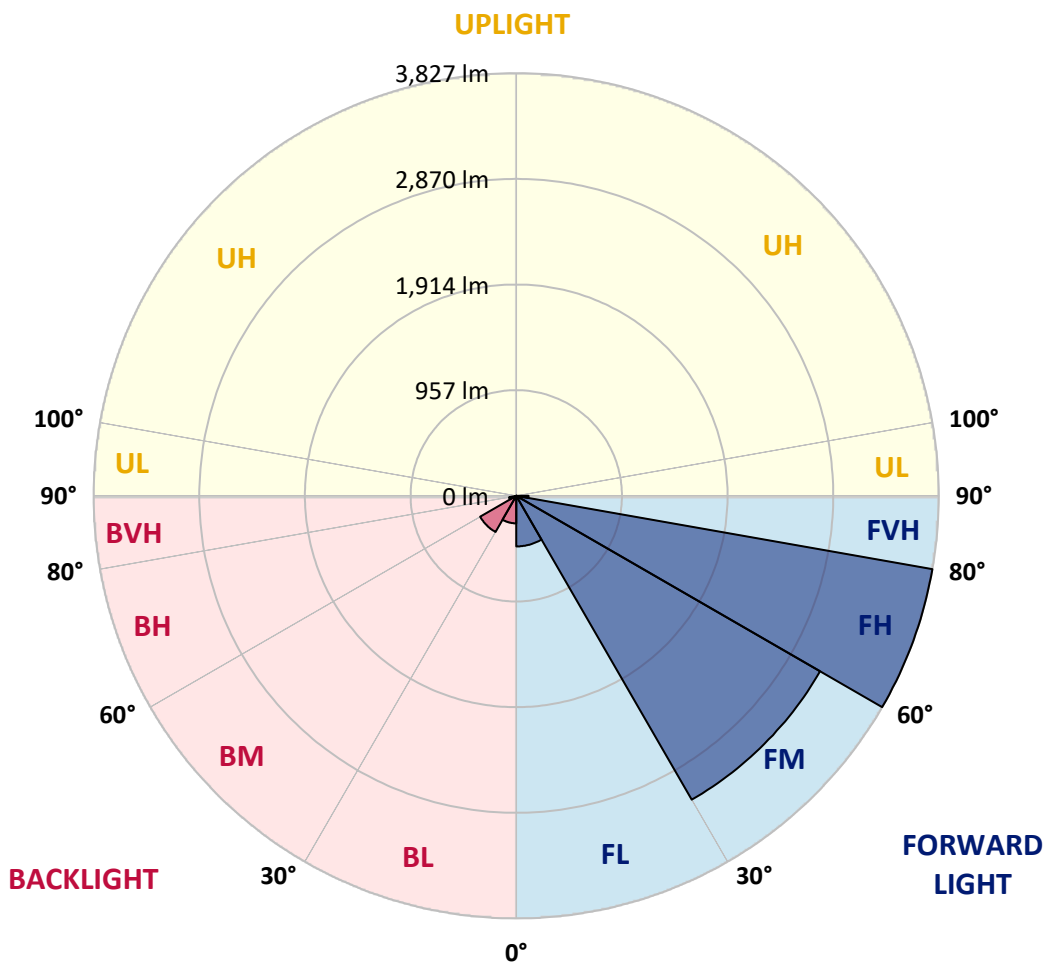


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	458.2	5.5			
FM (30°-60°)	3177.5	38.4			
FH (60°-80°)	3827.2	46.3			G2/5000
FVH (80°-90°)	111.6	1.3			G2/225
BL (0°-30°)	249.5	3.0	B1/500		
BM (30°-60°)	377.7	4.6	B1/1000		
BH (60°-80°)	64.8	0.8	B0/110		G0/110
BVH (80°-90°)	0.4	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 IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	32°	35°	45°	55°	65°	75°	85°
0°	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5
2.5°	1233.0	1245.7	1243.8	1248.2	1259.1	1263.4	1275.5	1288.8	1307.3	1319.9	1328.2
5°	1104.1	1113.7	1115.0	1137.2	1148.0	1160.0	1195.6	1234.3	1277.4	1311.7	1334.6
7.5°	966.5	971.5	981.7	1010.9	1038.2	1050.2	1104.1	1171.4	1239.4	1303.5	1344.7
10°	852.9	858.6	877.0	908.1	933.5	949.3	1024.3	1108.6	1203.8	1299.0	1359.3
12.5°	788.2	791.3	798.3	826.2	858.6	875.7	956.3	1052.8	1175.3	1300.9	1384.0
15°	783.7	782.5	774.2	785.7	814.8	832.6	911.3	1014.8	1149.9	1307.3	1413.2
17.5°	807.2	804.0	784.3	784.3	808.5	823.1	892.2	994.4	1137.2	1321.9	1454.5
20°	843.4	838.3	805.9	803.4	826.9	842.1	903.7	995.7	1139.7	1349.1	1509.7
22.5°	889.0	883.4	834.5	835.8	861.1	876.4	936.6	1018.5	1155.6	1382.8	1568.7
25°	948.7	942.3	884.6	882.0	908.7	922.1	985.5	1059.2	1177.8	1424.7	1646.1
27.5°	1028.0	1014.8	945.5	941.8	970.3	987.4	1044.5	1113.7	1217.2	1482.4	1750.2
30°	1093.4	1078.8	1012.8	1002.6	1033.1	1046.5	1105.5	1187.3	1294.6	1583.3	1894.3
32.5°	1179.1	1157.5	1080.1	1053.4	1085.8	1102.9	1193.6	1324.4	1409.4	1689.9	2065.6
35°	1372.0	1358.6	1264.1	1170.8	1168.9	1190.5	1323.7	1462.8	1527.4	1856.2	2299.1
37.5°	1648.0	1638.5	1538.3	1413.2	1377.1	1366.9	1481.8	1615.1	1715.9	2084.7	2570.8
40°	1968.5	1946.3	1854.2	1748.3	1701.3	1671.5	1668.4	1841.6	1962.1	2394.9	2853.8
42.5°	2198.2	2157.6	2045.9	2038.3	2028.2	1997.0	1907.0	2172.8	2280.1	2728.7	3156.4
45°	2439.4	2377.8	2211.6	2183.0	2179.2	2177.3	2267.4	2565.0	2626.6	3090.4	3467.4
47.5°	2626.6	2577.7	2441.3	2428.6	2444.5	2487.6	2743.9	2981.3	2968.6	3412.9	3728.2
50°	2876.0	2839.1	2687.5	2711.6	2793.5	2863.9	3281.5	3435.1	3249.7	3666.7	3918.0
52.5°	3170.4	3102.5	2961.7	3027.0	3152.7	3270.1	3851.9	3832.3	3447.1	3857.7	4059.5
55°	3425.6	3377.3	3329.1	3397.0	3584.8	3731.4	4367.2	4129.9	3590.5	4011.2	4121.7
57.5°	3857.1	3845.6	3796.1	3865.3	4093.1	4245.5	4828.6	4360.9	3682.6	4091.2	4048.7
60°	4495.5	4477.1	4385.1	4473.2	4770.2	5009.5	5253.8	4568.4	3703.5	4060.1	3838.7
62.5°	5263.3	5200.5	5121.8	5251.9	5659.3	5764.6	5654.2	4691.5	3625.4	3812.6	3332.2
65°	5980.4	5915.7	5917.5	6191.7	6635.3	6707.0	6121.3	4673.1	3397.0	3192.6	2457.7
67.5°	6529.3	6518.5	6596.0	7130.9	7710.9	7661.4	6538.9	4397.7	2719.9	2069.4	1306.0
70°	6557.2	6578.1	6800.2	7703.3	8292.2	8213.5	6503.3	3574.7	1695.6	951.9	514.7
71°	6219.6	6360.5	6667.6	7685.6	8326.5	8224.3	6203.7	2994.0	1243.8	663.8	371.2
72.5°	5300.1	5374.3	6038.1	7233.1	8055.5	7837.2	5444.1	2098.6	796.4	406.1	213.2
75°	2919.1	3101.9	4043.6	5674.5	6443.0	6251.3	3548.0	996.9	397.3	222.1	88.2
77.5°	1389.8	1354.2	1972.9	3374.8	4368.5	4358.4	1787.6	443.0	231.6	150.4	44.4
80°	397.3	446.7	755.1	1604.2	2425.4	2452.0	686.6	213.9	160.5	117.4	22.9
82.5°	119.9	122.4	277.3	709.5	1206.3	1137.2	257.7	109.2	115.5	93.3	13.3
85°	20.9	26.0	81.8	250.0	460.1	349.0	64.8	52.1	76.1	61.6	7.7
87.5°	1.3	1.9	27.2	28.6	40.6	23.5	11.4	7.7	16.5	16.5	4.5
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°	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5	1329.5
2.5°	1333.9	1337.7	1335.2	1329.5	1319.9	1308.5	1293.3	1280.6	1269.8	1264.1	1271.1
5°	1342.2	1347.2	1334.6	1306.0	1262.8	1215.9	1162.6	1121.3	1088.9	1078.8	1075.0
7.5°	1354.9	1358.0	1323.7	1260.3	1168.9	1057.9	960.8	878.9	815.4	796.4	768.5
10°	1371.3	1369.5	1304.7	1186.7	1026.1	859.2	708.9	597.1	512.8	482.3	479.8
12.5°	1396.7	1386.6	1280.6	1086.4	856.1	637.7	451.9	353.5	300.2	282.4	278.6
15°	1428.4	1404.4	1242.5	969.0	655.6	411.8	278.6	248.8	241.8	240.5	239.3
17.5°	1465.9	1427.8	1192.4	824.9	460.7	267.2	232.9	232.3	232.9	231.6	231.0
20°	1516.7	1452.6	1132.7	654.3	304.6	225.3	222.1	222.1	222.8	222.1	222.1
22.5°	1570.7	1481.8	1059.2	499.4	229.8	213.9	213.2	214.5	215.8	215.1	215.1
25°	1637.3	1519.9	962.0	342.0	205.6	204.4	205.0	207.5	210.1	210.7	210.1
27.5°	1733.7	1566.8	858.0	235.4	188.5	189.7	196.1	202.4	206.2	206.9	206.9
30°	1842.2	1618.8	722.2	191.0	174.5	174.5	182.2	194.2	202.4	203.7	204.4
32.5°	1981.8	1679.1	571.8	172.0	161.2	160.0	166.9	181.5	196.7	201.2	201.2
35°	2154.5	1750.2	425.2	160.0	151.6	148.5	152.3	164.3	184.0	196.7	198.0
37.5°	2356.9	1817.5	310.9	149.1	142.8	138.3	140.9	150.4	166.3	185.3	190.4
40°	2544.1	1877.1	232.3	140.3	133.9	130.7	132.6	137.1	150.4	168.2	171.3
42.5°	2748.4	1923.5	184.7	130.7	125.0	123.7	123.7	125.6	134.6	144.7	145.3
45°	2952.1	1939.9	154.8	119.3	115.5	116.7	116.1	114.9	118.7	117.4	117.4
47.5°	3097.4	1920.3	128.2	108.5	108.5	110.4	107.2	102.8	100.9	93.3	93.9
50°	3197.1	1848.6	105.4	95.8	100.9	103.4	97.1	90.1	83.1	74.8	73.0
52.5°	3238.4	1721.0	86.3	79.3	89.5	92.7	85.0	76.8	66.0	59.0	57.1
55°	3211.7	1563.7	71.7	64.8	75.5	79.3	71.7	62.1	50.1	42.6	41.2
57.5°	3094.3	1375.8	60.9	51.4	60.3	62.8	57.8	47.6	35.6	27.9	27.9
60°	2891.2	1181.6	49.5	40.6	45.1	48.9	43.8	34.2	24.1	17.2	15.9
62.5°	2479.4	959.5	39.9	31.7	31.7	34.9	30.4	24.7	15.2	8.9	8.2
65°	1790.2	658.1	31.7	23.5	22.9	22.9	19.0	16.5	8.9	3.8	2.5
67.5°	972.9	371.2	25.4	17.7	15.9	15.2	12.0	9.5	3.8	0.7	0.0
70°	382.7	142.8	19.7	12.0	10.2	9.5	6.3	4.5	2.5	0.0	0.0
71°	259.5	98.4	17.2	10.2	8.2	7.0	5.0	3.8	1.9	0.0	0.0
72.5°	148.5	60.9	13.3	7.7	6.3	5.0	3.8	2.5	1.9	0.0	0.0
75°	64.8	31.1	8.2	5.7	4.5	3.2	2.5	1.9	0.7	0.0	0.0
77.5°	33.0	17.2	5.7	4.5	2.5	1.9	1.3	0.7	0.0	0.0	0.0
80°	18.4	8.9	3.8	2.5	1.9	1.3	0.7	0.7	0.0	0.0	0.0
82.5°	10.2	5.0	1.9	1.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0
85°	6.3	3.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	3.2	1.3	0.0	0.0	0.0	0.0	0.7	0.7	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)