

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: P300642

Luminaire Tested: **GLNA-AF-08-LED-E1-AFL-7027-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P300642
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24297)
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-AFL-7027-HSS
Description: GALLEONNAIRE AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 2700K CCT 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND Automotive Frontline WITH HOUSESIDE SHIELD OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30824.3 lumens
Efficiency: N/A
Efficacy: 69.3 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G2

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

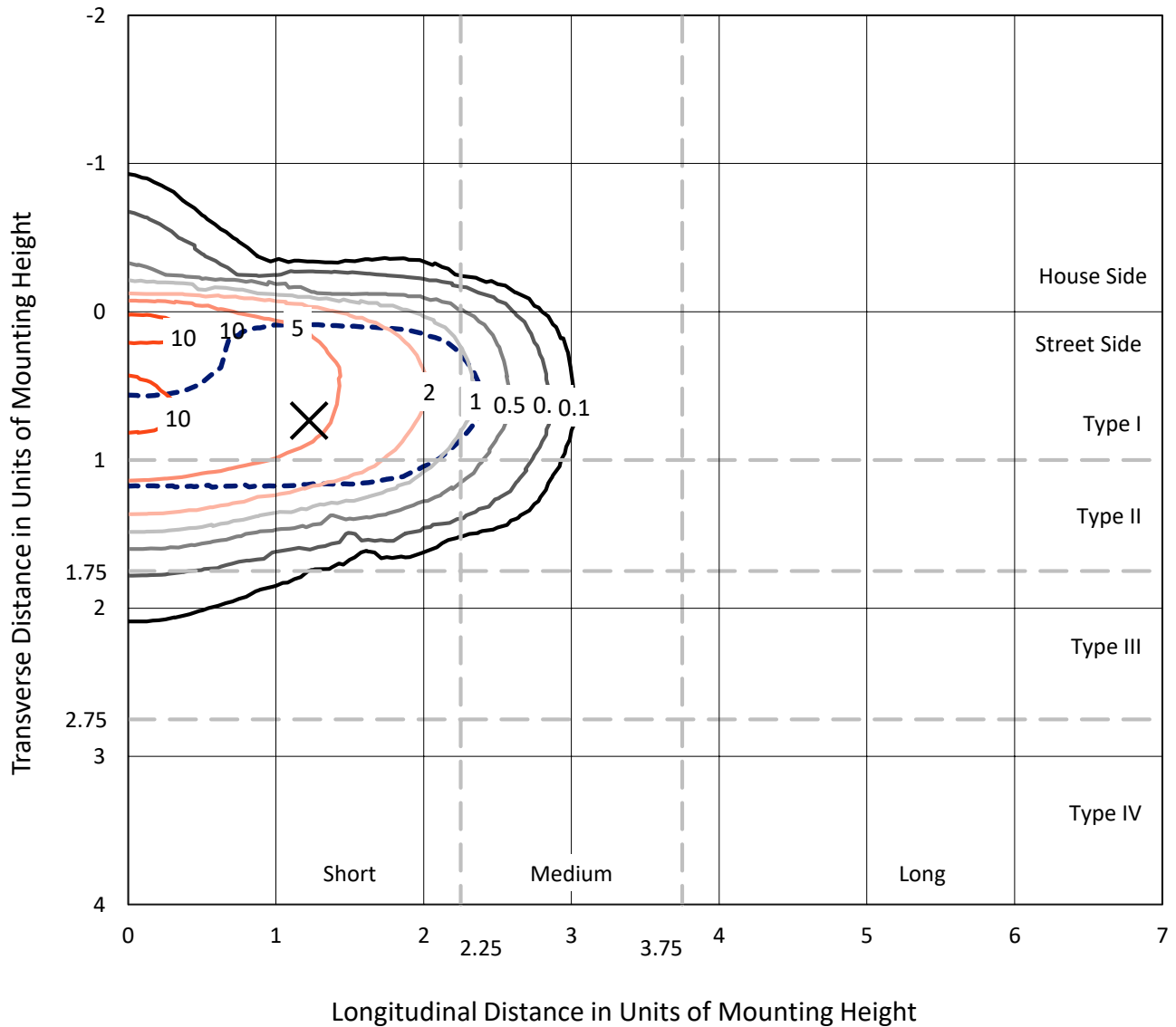


REPORT NUMBER: P300642

CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

Iso-Footcandle Lines of Horizontal Illumination

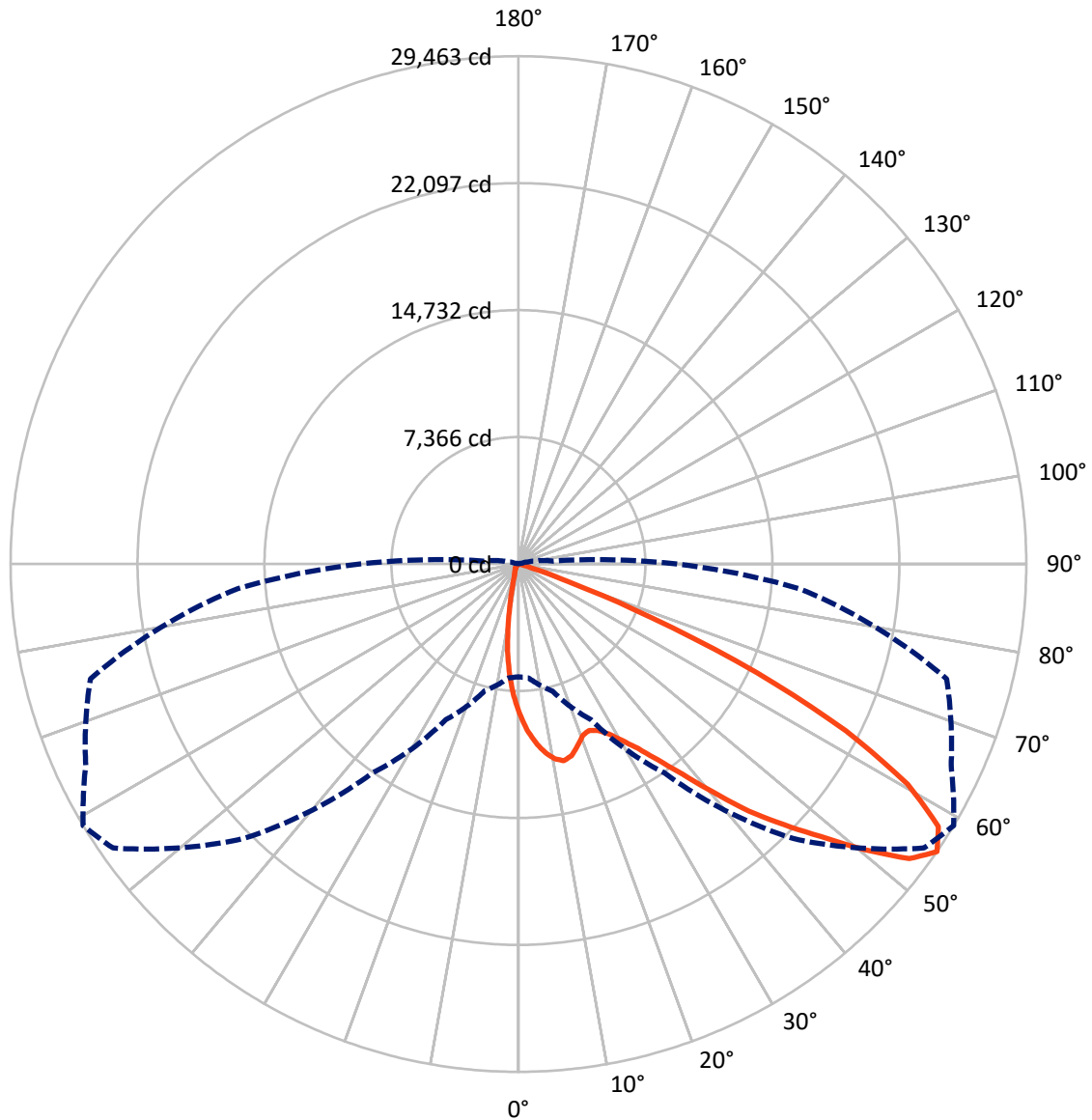
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P300642
CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 59-Deg Lateral - - - Horizontal Cone Through 55-Deg Vertical

REPORT NUMBER: P300642

CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1721.7	0.0	1721.7
	% Fixture	5.6	0.0	5.6
Street Side	Lumens	29102.5	0.0	29102.5
	% Fixture	94.4	0.0	94.4
Total	Lumens	30824.3	0.0	30824.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	726.8	2.4
10°-20°	1740.1	5.6
20°-30°	2961.0	9.6
30°-40°	5092.3	16.5
40°-50°	7862.0	25.5
50°-60°	7903.8	25.6
60°-70°	4053.1	13.1
70°-80°	439.2	1.4
80°-90°	45.9	0.1
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°	30824.3	100.0
0°-180°	30824.3	100.0

Coefficient of Utilization



REPORT NUMBER: P300642

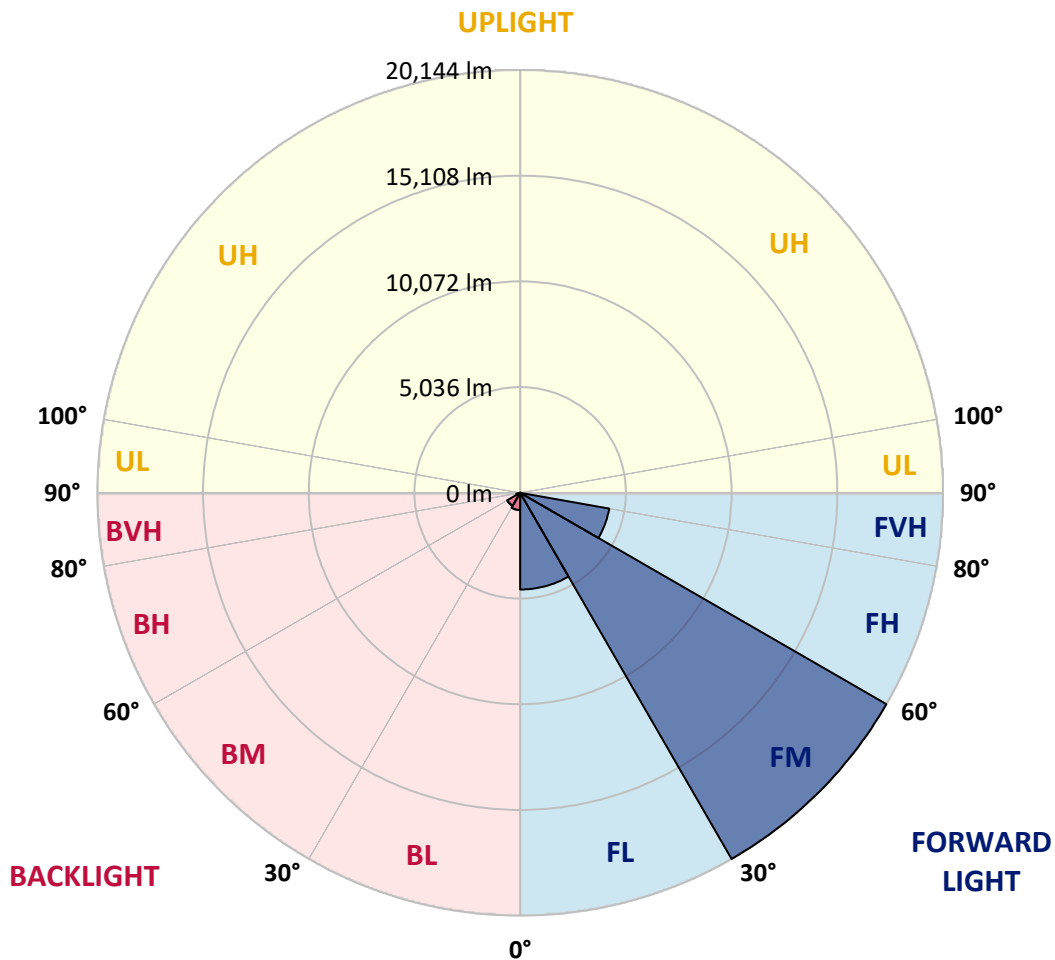
CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4606.2	14.9			
FM	(30°-60°)	20143.5	65.3			
FH	(60°-80°)	4307.9	14.0			G2/5000
FVH	(80°-90°)	45.0	0.1			G1/100
BL	(0°-30°)	821.8	2.7	B2/1000		
BM	(30°-60°)	714.5	2.3	B1/1000		
BH	(60°-80°)	184.5	0.6	B1/500		G1/500
BVH	(80°-90°)	0.9	0.0			G0/10
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





REPORT NUMBER: P300642

CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9
2.5°	10266.8	10157.6	10124.9	10103.1	10003.0	9877.5	9706.5	9626.5	9462.8	9199.0	8875.2
5°	11207.2	11187.2	11114.5	11074.4	10967.1	10788.8	10516.0	10385.0	10124.9	9681.0	9100.8
7.5°	10796.1	10921.6	11021.7	11189.0	11400.0	11392.8	11163.6	11027.1	10736.1	10150.4	9351.8
10°	9208.1	9309.9	9473.7	9853.8	10628.8	11312.7	11582.0	11483.7	11250.9	10581.5	9593.7
12.5°	8897.0	8886.1	8915.2	9026.2	9431.8	10406.8	11511.0	11709.3	11662.0	10976.2	9822.9
15°	9062.6	9049.8	9046.2	9084.4	9182.6	9593.7	10978.0	11547.4	11913.0	11341.8	10017.6
17.5°	9526.4	9471.8	9442.7	9411.8	9382.7	9484.6	10337.7	11094.4	11951.2	11662.0	10179.5
20°	10321.3	10230.4	10123.1	9948.4	9784.7	9733.8	10068.5	10628.8	11814.8	11905.7	10285.0
22.5°	11320.0	11203.6	11018.0	10699.7	10366.8	10174.0	10201.3	10481.4	11611.1	12171.3	10334.1
25°	12442.4	12293.2	12045.8	11603.8	11114.5	10772.5	10594.2	10692.4	11518.3	12482.4	10390.5
27.5°	13644.8	13479.2	13155.4	12553.3	11998.5	11536.5	11172.7	11159.9	11676.5	12889.9	10481.4
30°	14836.3	14810.8	14388.8	13752.1	13017.2	12455.1	11931.2	11863.9	12118.6	13453.8	10661.5
32.5°	16426.1	16235.1	15718.5	15063.6	14216.0	13541.1	12920.8	12764.3	12797.1	14110.4	10939.8
35°	18430.7	18221.5	17493.9	16589.8	15642.1	14845.3	14159.6	13946.7	13866.7	15185.5	11409.1
37.5°	19725.9	19722.2	19265.7	18345.2	17328.4	16449.8	15703.9	15454.7	15292.8	16484.3	12136.8
40°	19760.4	19845.9	19906.0	19896.9	19172.9	18363.4	17701.3	17393.9	17017.3	18219.7	13077.2
42.5°	18699.9	18920.0	19449.4	20348.0	20777.3	20455.3	19896.9	19594.9	19034.6	20077.0	14223.2
45°	17266.5	17419.3	18345.2	20000.6	21646.8	22529.1	22103.4	21563.1	20824.6	22014.3	15251.0
47.5°	16624.4	16651.7	17250.1	19067.4	21712.3	24228.1	24486.4	23607.8	22450.8	23575.0	16055.0
50°	14705.3	14754.4	15580.2	17450.2	20944.7	25030.3	26880.2	26047.1	24224.4	24777.4	16347.9
52.5°	11083.5	11152.7	12200.4	14792.6	18834.5	24688.3	28593.8	28391.9	26167.2	25365.0	16364.3
55°	6539.5	6630.5	7631.0	9957.5	14814.4	22512.7	28721.1	29463.3	27700.6	25712.4	16338.8
57.5°	3054.2	3117.9	3690.9	5129.7	9213.5	17792.2	26803.8	28728.4	28546.5	25896.1	16518.9
60°	1622.6	1640.8	1779.0	2221.1	4163.8	11281.8	23062.0	25941.6	27775.2	26150.8	16739.0
62.5°	1240.6	1246.1	1238.8	1291.5	1749.9	5007.9	17432.1	21326.7	24670.1	25959.8	16495.2
65°	1075.1	1084.2	1033.2	1020.5	1122.4	1786.3	10355.9	15201.9	19385.7	23382.2	14834.4
67.5°	964.1	967.7	905.9	853.1	871.3	965.9	4085.6	8322.2	12831.6	17139.2	10752.5
70°	887.7	884.1	816.8	733.1	709.4	660.3	1298.8	3050.6	6132.1	8691.5	5000.6
72.5°	785.8	787.7	754.9	645.8	589.4	462.0	602.1	889.5	1830.0	2368.4	1171.5
75°	696.7	687.6	647.6	578.5	485.7	303.8	298.3	396.6	563.9	560.3	252.8
77.5°	503.9	494.8	507.5	474.8	372.9	196.5	149.2	191.0	229.2	221.9	70.9
80°	369.3	363.8	327.4	394.7	329.2	134.6	92.8	101.9	118.2	100.0	21.8
82.5°	252.8	251.0	231.0	218.3	187.4	81.9	58.2	63.7	76.4	56.4	10.9
85°	40.0	45.5	167.4	132.8	111.0	36.4	40.0	43.7	50.9	30.9	3.6
87.5°	0.0	0.0	78.2	69.1	21.8	14.6	23.6	25.5	25.5	16.4	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



REPORT NUMBER: P300642

CATALOG NUMBER: GLNA-AF-08-LED-E1-AFL-7027-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9	8676.9
2.5°	8709.7	8527.8	8191.2	7843.8	7521.8	7138.0	6874.2	6676.0	6446.7	6384.9	6519.5
5°	8769.7	8425.9	7701.9	6914.2	6173.9	5353.5	4725.9	4229.3	3780.0	3627.2	3765.5
7.5°	8864.3	8353.1	7172.6	5875.6	4587.7	3307.1	2430.3	1853.6	1486.2	1377.0	1435.2
10°	8958.9	8247.6	6559.5	4645.9	2885.0	1609.9	1047.8	836.8	758.5	742.2	751.3
12.5°	9037.1	8105.7	5811.9	3303.4	1542.6	862.2	685.8	651.2	640.3	640.3	643.9
15°	9084.4	7891.1	4926.0	2101.0	887.7	651.2	598.5	587.6	587.6	589.4	593.0
17.5°	9078.9	7618.2	3956.5	1271.5	664.0	576.6	545.7	536.6	534.8	538.4	540.3
20°	9011.6	7261.7	2983.3	838.6	578.5	525.7	494.8	478.4	476.6	480.2	483.9
22.5°	8884.3	6821.5	2133.8	645.8	522.1	476.6	438.4	423.8	423.8	427.5	431.1
25°	8729.7	6283.0	1458.9	547.5	471.1	423.8	387.5	374.7	378.4	387.5	389.3
27.5°	8536.8	5677.3	991.4	469.3	409.3	371.1	343.8	334.7	343.8	356.5	360.2
30°	8371.3	5046.1	707.6	405.7	347.4	320.2	303.8	303.8	316.5	340.2	345.6
32.5°	8244.0	4434.9	545.7	358.4	302.0	278.3	269.2	278.3	298.3	322.0	327.4
35°	8227.6	3931.0	462.0	320.2	269.2	245.6	241.9	258.3	278.3	296.5	300.1
37.5°	8353.1	3465.3	416.6	289.2	240.1	218.3	214.6	234.7	254.7	276.5	282.0
40°	8591.4	3099.7	383.8	260.1	216.5	192.8	185.5	200.1	227.4	256.5	263.8
42.5°	8900.7	2797.7	347.4	231.0	192.8	160.1	151.0	167.4	196.5	227.4	236.5
45°	9195.3	2537.6	307.4	198.3	161.9	123.7	120.1	141.9	156.4	187.4	194.6
47.5°	9357.2	2308.4	272.9	161.9	125.5	100.0	100.0	105.5	120.1	156.4	163.7
50°	9302.7	2124.7	236.5	120.1	87.3	76.4	76.4	74.6	96.4	125.5	131.0
52.5°	9193.5	2019.2	203.7	92.8	60.0	54.6	49.1	54.6	67.3	80.0	81.9
55°	9177.2	2001.0	171.0	74.6	41.8	36.4	27.3	27.3	27.3	25.5	21.8
57.5°	9304.5	2030.1	143.7	60.0	30.9	23.6	14.6	0.0	0.0	0.0	0.0
60°	9435.5	2061.0	123.7	41.8	21.8	12.7	1.8	0.0	0.0	0.0	0.0
62.5°	9217.2	1991.9	103.7	25.5	16.4	5.5	0.0	0.0	0.0	0.0	0.0
65°	8096.6	1695.4	81.9	18.2	10.9	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	5759.1	1135.1	54.6	10.9	1.8	0.0	0.0	0.0	0.0	0.0	0.0
70°	2628.5	474.8	34.6	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	562.1	147.3	23.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	114.6	107.3	9.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	36.4	169.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	21.8	121.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	3.6	18.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)